HANS MARCHAND

THE CATEGORIES AND TYPES OF PRESENT-DAY ENGLISH WORD-FORMATION
THE CATEGORIES AND TYPES OF PRESENT-DAY ENGLISH WORD-FORMATION
A SYNCHRONIC-DIACHRONIC APPROACH

BY

HANS MARCHAND

1960

OTTO HARRASSOWITZ • WIESBADEN
PREFACE

It is customary to begin a book with what the Ancients called the exordium, i.e. a statement why it was written. Books on English grammar are not wanting, but it is somewhat surprising to see how very few there are that deal with word-formation. This subject has been greatly neglected in grammatical works while the parts on phonetics, accidence and syntax have always received full attention. The last three decades have also seen the rise of phonemics. For the Romance languages we have the extensive treatises by Diez and Meyer-Lübke, for French those by Darmesteter, Nyrop, Meyer-Lübke, for German (to quote only the most extensive works on the subject) those by Wilmanns and Henzen. The first book on English word-formation was that of Herbert Koziol (Handbuch der Englischen Wortbildungslehre, Heidelberg 1937). It was planned as a condensation of earlier grammar accounts and monographs, but it is uncritical in that it proceeds without a previous inquiry into the essential problems of word-formation. The author proposes to give a historical description, but we get no clear insight into the derivational processes as no proper distinction is made between elements which are morphologically relevant and those which are not. The relations between stress and word-formation are not touched upon, nor are phonological changes involved by derivation.

Shortly before his death, Jespersen published the sixth volume of his Modern English Grammar, Morphology, which covers 'accidence' as well as word-formation. Though there are a few excellent chapters, the book is not one of the best. Jespersen has written (as a matter of fact, many chapters were written by his assistants and later revised by him). We miss the same distinction between etymological and derivative (morphological) word elements we have observed with Koziol; we also miss a chapter on pre-particle compounds. When Jespersen’s book appeared, the major part of my own was finished. In any case, the method Jespersen had followed was quite different from mine as the reader will find out for himself.

My sincere thanks are offered to all friends and colleagues, most of them at Bard College, Yale University, and the University of Florida, who answered questions and patiently bore the strain of 'informancy'. Their help has been invaluable for the clarification of linguistic problems. I should like to record the debt of gratitude which I owe to Professor Hans Krahe, Tübingen, for introducing me to the publisher of this book, and to the publisher for accepting the work. I owe a special debt to Dr. L. Reichert, publication manager, whose kind understanding and cooperation in the process of publication I cannot praise highly enough. I am indebted to Professor K. Schneider, Münster, for going over the manuscript and making valuable suggestions of a practical kind, and to Mr. Nigel Foxell, Tübingen, for reading the manuscript and improving it textually. Miss Martha Morril, Beverly Farms, Mass., read an earlier draft.

H. M.
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4.11 -ary

4.12 -arian

4.13 -ary, 4.14 -ate (type consulate)

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4.18 -ation

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ABBREVIATIONS

ADD Wentworth, American Dialect Dictionary (see Bibliography III)
ASp American Speech (journal)
Bally Linguistique générale (see Bibliography II)
Baugh A History of the English Language. New York 1935
Bloch Dictionnaire étymologique (see Bibliography III)
Carr Nominal Compounds in Germanic. St. Andrews Univ. Publ. XLI. London 1939
DA A Dictionary of Americanisms (see Bibliography III)
DAE A Dictionary of American English (see Bibliography III)
Danielsson Studies on the accentuation of polysyllabic Latin, Greek, and Romance loan-words in English, with special reference to those ending in -able, -ate, -ator, -ible, -ic, -ical, and -ize. Stockholm Studies in English. III. 1948
Darmesteter Cours de grammaire historique (see Bibliography II)
DG Hatzfeld, A., Dictionnaire général de la langue française (see Bibliography III)
Eckhardt Die angelsächsischen Deminutivbildungen. Engl. Studien 32 (1903) 325—366
FEW Wartburg, W. von, Französisches Etymologisches Wörterbuch (see Bibliography III)
Henzen Deutsche Wortbildung (see Bibliography II)
Hietsch Moderne englische Wortbildungselemente (see Bibliography I)
Je(sp.)/GS Growth and Structure of the English Language 1956
Je(sp.)/MEG Modern English Grammar (see Bibliography I)
Je(sp.)/Ling. Linguistica (see Bibliography I)
Je(sp.)/PG The Philosophy of Grammar. London 1924
Juret Juret, A.-C., Formation des noms et des verbes en latin et en grec. Paris 1937
KL Kluge, F., Abriß der deutschen Wortbildungselehre (see Bibliography II)
KIEW Kluge, F., Etymologisches Wörterbuch der Deutschen Sprache1953
Ko Koziol, H., Handbuch der englischen Wortbildungslehre (see Bibliography I)
MeAL Mencken, H. K., The American Language (see Bibliography I)
M.-L. Meyer-Lübke, W., Historische Grammatik der französischen Sprache (see Bibliography II)
Ny Nyrop, Kr., Grammaire historique de la langue française (see Bibliography II)
# Abbreviations

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<tr>
<td>OED</td>
<td>Oxford English Dictionary</td>
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<tr>
<td>OLA</td>
<td>Bloch, B. and Trager, G. L., Outline of Linguistic Analysis. Baltimore 1942</td>
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<td>RD</td>
<td>The Reader’s Digest</td>
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<tr>
<td>Reifer</td>
<td>Dictionary of New Words (see Bibliography III)</td>
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<td>Rotzoll</td>
<td>Die Deminutivbildungen im Neuenglischen. Heidelberg 1910 (= Anglistische Forschungen 31)</td>
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<td>Wi</td>
<td>Wilhmanns, W., Deutsche Grammatik (see Bibliography II)</td>
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<td>ptc(s)</td>
<td>participle(s)</td>
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<td>qu.</td>
<td>quotation, quoted</td>
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<td>rec.</td>
<td>recent, recorded</td>
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<td>rev.</td>
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<td>sb(s)</td>
<td>substantive(s)</td>
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<td>Scotch</td>
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<td>Scand.</td>
<td>Scandinavian</td>
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<td>sf(s)</td>
<td>suffix(es)</td>
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<td>singular</td>
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<td>Shakespeare</td>
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<td>slang</td>
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<td>spelling</td>
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<td>Spl.</td>
<td>Supplement</td>
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<td>Standard</td>
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<td>verbal substantive</td>
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<td>vg</td>
<td>vulgar</td>
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<tr>
<td>wffb</td>
<td>word-formation (or word(s) formed) on a foreign basis of coining</td>
</tr>
<tr>
<td>wfnb</td>
<td>word-formation (or word(s) formed) on a native basis of coining</td>
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</tbody>
</table>
SYMBOLS USED

... designates the (content of a) word or radical in the analysis of composites
\( \text{or} \) designates heavy stressed syllable or member of composite
\( \text{or} \) designates middle stressed syllable resp. member of composite
\(-/-\) indicates member of composite
* following a word designates ‘historical composites’, i.e. such as have become monemes for synchronic analysis
1234 the date after a word refers to the first quotation for it in the OED
\( \sim \) indicates phonemic, morphophonemic, or derivative opposition
[ ] enclose phonetic symbols
// enclose phonemic symbols

### Vowels

<table>
<thead>
<tr>
<th>i as in bee</th>
<th>u as in fool</th>
<th>o as in above</th>
<th>a as in but</th>
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<tr>
<td>i</td>
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### Consonants

<table>
<thead>
<tr>
<th>p as in pit</th>
<th>ř as in this</th>
<th>hw as in while</th>
<th>b as bit</th>
<th>s as see</th>
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</thead>
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<tr>
<td>p</td>
<td>ř</td>
<td>hw</td>
<td>b</td>
<td>s</td>
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<td>t as till</td>
<td>z as zoo</td>
<td>n as not</td>
<td>d as do</td>
<td>ř as she</td>
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<tr>
<td>d as do</td>
<td>ř as she</td>
<td>n as not</td>
<td>k as cut</td>
<td>ř as measure</td>
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<tr>
<td>g as go</td>
<td>tš as watch</td>
<td>j as yet</td>
<td>f as full</td>
<td>dž as hedge</td>
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<tr>
<td>v as vision</td>
<td>h as how</td>
<td>l, m, n indicate</td>
<td>v</td>
<td>h</td>
</tr>
<tr>
<td>Š thin</td>
<td>w as watch</td>
<td>syllabic l, m, n</td>
<td>Š</td>
<td>w</td>
</tr>
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</table>
The following is a selected list of writings directly or indirectly connected with the problem of English word-formation in general. Publications dealing with special questions are mentioned in the text. See also the references under the various headings in Koziol, especially for literature concerning the earlier stages of the language.

I. ENGLISH WORD FORMATION

Franz, W., Die Sprache Shakespeares. (= Shakespeare-Grammatik) Halle 1939, pp. 100—153.
Langenfelt, G., Select Studies in Colloquial English of the Late Middle Ages. Lund 1933 (esp. 70ff.).

II. FRENCH AND GERMAN WORD FORMATION

Henzen, W., Deutsche Wortbildung². Tübingen 1957 (q. Henzen); quotations are from the first edition, Halle 1947.
Nyrop, Kr., Grammaire historique de la langue française. Tome III. Copenhagen 1908 (q. Ny).

III. DICTIONARIES
The Oxford English Dictionary. Oxford 1933 (q. OED or NED).
I. INTRODUCTION

The term ‘word’

1.1.1. In a book on word-formation, the term ‘word’ should first be defined. It is taken to denote the smallest independent, indivisible unit of speech, susceptible of being used in isolation. A word may have a heavy stress, though some never take one. To preceding the ‘infinitive’ never has a heavy stress, but it is a word as it can be separated from the verbal stem by an adverb (as in to carefully study). A composite may have two heavy stresses so long as it is not analysable as a syntactic group. There is a marked tendency in English to give preparticles full stress though they do not exist as independent words. Indivisible composites such as arch-enemy, crypto-communist, unlucky, therefore are morphological units whereas combinations like stone wall, gold watch are syntactic groups. As for the criterion of indivisibility, we say that the article a is a word as I can interpolate words and groups of words between article and substantive (a nice man, a very nice man, an exceptionally gifted man). But a as in aglitter cannot be separated from the verb stem with which it forms a group and therefore is not a free morpheme (word). With regard to the criterion of isolability, we must not assume that all words can be used by themselves, in isolation. It is in the very nature of determiners like the article the to be used in conjunction with the word they determine, so we need not advocate Bloomfield’s criterion of parallelism (this thing: that thing: the thing = this: that: (the)) to establish the word character of the (Language 179).

1.1.2. A word and, for that matter, any morpheme is a two facet sign, which means that it must be based on the significate/significant (F signifié/ signifiant) relationship posited by Saussure. By purely distributional criteria we may be led to regard as words such independent elements as meet the above requirements except that of the sign character. The phrase make out (as in I cannot make him out) is an unanalysable semantic unit, though formally this unit is broken up. The elements make and out distributionally behave like words, yet the semantic content of the phrase cannot be inferred from that of the constituents make and out. These elements do not function in the productive system where only meaningful units lead to analogic new formations. It might be said that we never in fact know when a pseudo-morpheme starts to become productive and that there are examples of unmeaningful sound

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1 This definition combines the one given by Bloomfield (the word considered as the minimal independent unit of utterance; see Language 2, 1926, 156) and the criterion of inseparability advocated by many scholars, most recently by Martinet (see Actes du Sixième Congrès International des Linguistes, Paris 1948, 27). On the whole question see A. Rosetti, Le Mot. Copenhagen-Bucharest 1947.

1 Marchand, The categories
I. Introduction

groups becoming analysable and also productive, as hamburger, which certainly is monomorphemic, has given rise to cheeseburger, beefburger and others. But this happened because the shortening burger acquired the full semantic status of hamburger in combinations. Thus it may be safely assumed that only meaningful elements can become productive and that, whenever an unmeaningful unit seemingly does attract new formations, this is so because it has acquired sign character (see 4. 1. 7).

1. 1. 3. The existence of unique semi-morphemic elements, occurring in conjunction with signs only (as cran- in cran-berry, Mon- in Mon-day), is not denied, but from the point of view of word-formation, such blocked morphemes are of little value. Though identifiable (cran-, Mon- have distinctive semic features which make them opposable to other full or semi-morphemes: cran-berry is distinct from berry, blue-berry, or mul-berry, Mon-day is distinct from day, Sun-day, or Tues-day) they are not productive, at least under normal circumstances.

Definition of the field of word-formation

1. 2. 1. Word-formation is that branch of the science of language which studies the patterns on which a language forms new lexical units, i.e. words. Word-formation can only treat of composites which are analysable both formally and semantically, as the remarks in the preceding paragraph have already made clear. The study of the simple word, therefore, insofar as it is an unanalysable, unmotivated sign, has no place in it. It is a lexical matter. A composite rests on a relationship between morphemes through which it is motivated. By this token, do-er, un-do, rain-bow are relevant to word-formation, but do, rain, bow are not.

1. 2. 2. The terms ‘analysable composite’ and ‘motivation’ require some comment. Saussure admitted as motivated signs combinations of full signs only, which are grammatical syntagmas. He explicitly states that expressive words are unmotivated signs. This means that they would not be relevant to word-formation. I do not subscribe to this opinion and have given my reasons for it elsewhere (7. 19). While admitting that we have complete motivation only in combinations composed of full linguistic signs, i.e. combinations intellectually motivated by the significates (as in rain-bow, do-er, un-do where a certain form goes with a certain underlying concept) we find that this is not the only kind of motivation that occurs in the coming of new words. This book, therefore, will deal with two major groups: 1) words formed as grammatical syntagmas, i.e. combinations of full linguistic signs, and 2) words which are not grammatical syntagmas, i.e. which are composites not made up of full linguistic signs. To the first group belong Compounding, Prefixation, Suffixation, Derivation by a Zero Morpheme and Backderivation, to the second Expressive Symbolism, Blending, Clipping, Rime and Ablaut Geminaton, Word-manufacturing. A detailed discussion will be found in the introductory chapters to each category. What is common to both groups is that a new coining is based on a synchronic relationship between morphemes.
Where there is no relationship in praesentia, we have to do with a moneme. That chap, for instance, is historically derived from chapman, is of no synchronic relevance. For the present-day speaker, no such relationship exists, therefore chap is a moneme.

1. 2. 3. As for derivatives of group 1), we have to state that a derivative is a syntagma consisting of a determinant and a determinatum, whether we have a compound (e.g. head-ache), a suffixal derivative (e.g. father-hood), or a prefixal derivative (e.g. un-do). Both parts are morphemes, i.e. signs based on a significate/significant relation. In the event of full compounds, the syntagma is opposable to either morphemic element (head-ache to head and ache). Prefixal and suffixal derivatives must be opposable to their unprefixed and unsuffixed bases (un-do to do, father-hood to father) and to other derivatives containing the same dependent morpheme (un-do to un-fasten, un-roll etc., father-hood to mother-hood, boy-hood, etc.).

1. 2. 4. The process called backderivation (backformation) has diachronic relevance only. That peddle vb is derived from peddler sb through reinterpretation is of historical interest. However, for synchronic analysis the equation is peddle : peddler = write : writer, which means that the diachronic process of backderivation does not affect the derivative correlation for present-day speakers who do not feel any difference between the relationship write : writer on the one hand and peddle : peddler on the other.

1. 2. 5. The derivative element may be absent in the significant of the derivative in which case we speak of derivation by a zero morpheme (father vb ‘treat as a father’, idle vb ‘be idle’ etc.). While admitting the possibility of contrary analyses I think such cases are less frequent than R. Godel seems inclined to admit. The one example he adduces in support of contradictory analysis is open to doubt. The equation scier : scie-O = hâcher : hâchoir, passer : passoire does not hold from the point of view of the significate: the action of ‘passer’ does not presuppose the existence of a ‘passoire’ (any more than a tamis or filtre) nor is the action of ‘hâcher’ subject to the existence of a ‘hâchoir’ (one could chop with any kind of knife). Yet one cannot ‘saw’ without a ‘saw’, i.e. the concept ‘saw’ is implied in the verbal concept ‘saw’. Though the problem is more complex than this isolated case suggests the general principle will be to assume that the concept which for its definition is dependent on the concept of the other pair member must be considered that of the derived word. Applied to scier ~ scie it means that scier is the marked form, derived by a zero morpheme from the sb scie.

1. 2. 6. From what has been stated (in 1.1) about the syntagmatic character of derived words it is evident that whenever a word is not analysable as consisting of two morphemes it is a moneme, not a derivative. Defense, apply are opposable as whole units only, not to fence, ply (as far as the signs are concerned which are not identical with the sound clusters of the second syllable

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1. Introduction

-fence, -ply). It thus follows that the study of aphaeretic words is not relevant to word-formation which disposes of the respective chapters in Koziol\(^1\) and Jespersen\(^2\).

1.2.7. It should be clear that loans from other languages, unless they have become analysable syntagmas (as e.g. dis-agreeable and trans-alpine in English) have no place in a study of word-formation. Koziol makes no distinction between derivative morphemes (i.e. parts of analysable syntagmas) and etymological elements in loan words. Monemic words such as crisis, frenzy, lassitude (under the "suffixes" -sis, -sy, -tude respectively) and many others are jumbled together with real derivatives such as bak-er, father-hood, shy-ness.

1.2.8. Koziol has a chapter "Irrtümliche Wortabgrenzung" where he treats of the 'coining' of new words by erroneous division such as an apron from a napron, an adder from a nadder. Such phenomena are nothing but accidents of la parole. The significate of napron has not been modified by the change to apron. Apron has remained the moneme which napron was (for the English speaker). And adder continues as the significant of the significate of nadder without any change in content. Neither word is opposable to its predecessor napperon and nadder respectively which have ceased to exist with the new significant. The formal change is merely a historic substitution of one form for another. Another chapter is entitled "Mißdeutung der Singular- oder Pluralform", dealing with such words as cherry from cheris (from Anglo-Norman cherise), riddle from ME redels (from OE rædelse), pea from ME pese. The objections raised in the case of 'erroneous word-division' apply here, too, though one might object that a moneme ending in -s has been reinterpreted as 'moneme / plural morpheme'. Yet an inflectional morpheme has not a primarily semantic value, it forms an inflected form of one and the same word, not a new lexical unit. Inflectional morphemes, therefore, are not relevant to word-formation.

Derivative relevancy and descriptive analysis

1.3.1. It has been argued against my approach that "the unproductiveness of one of the morphemes is not a fatal bar to analysis"\(^2\). This point can be argued in several ways. The composition of the words halfpenny and twopence, pronounced [hepən], [təpən] is still recognizable to the speaker of English. We may consider [he] an allomorph of /hæf/, [pən] and [pəns] allomorphs of /pən/ and /pəns/ respectively, thus giving the words the status of full compounds. However, descriptive analysis of words and derivative relevancy are not the same thing. While we have analysed the preceding combinations in terms of allomorph-containing compounds, it must be pointed out that the

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\(^1\) H. Koziol, Handbuch der englischen Wortbildungslehre (Heidelberg 1937) §§ 658—659, 674—675.

\(^2\) O. Jespersen, A Modern English Grammar (Copenhagen 1942) VI. 29. 81.

\(^3\) C. E. Bazell in Word 8 (1952) 38f. against my article 'Phonology, Morphology, and Word-formation', Neuphil. Mitt. 52 (1951) 87—95.
very fact of phonic change of one of the constituents contrasts with a relevant feature of compounding in English, viz. the preservation of the phonic character of the constituents versus their use as independent words. No first-word changes, and, with the exception of man and berry (in a few cases also land, as in Finland, Scotland), no second-word does either. In British English (not in American English), berry reduces the first vowel to [ə] while with man the reduction is common to both American and British English, but represents an unstable pattern (policeman, seaman etc. are regular with [ə], but milkman, mailman and others vary). Historically, the phenomenon is explained by the fact that the words man, land, and berry have been frequent as second-words from the oldest times of the language known to us. They have thus acquired a semi-suffixal character. Note that the pronunciation [land] occurs only with ethnic names, not in recent compounds such as homeland, fatherland, dreamland, and that similarly the vowel is not reduced in man when the concept ‘man’ is fully present in the significate.

1.3.2. It is therefore not enough to give a descriptive analysis of a composite in terms of morphemes and allomorphs, we also have to state what is the position of those linguistic forms within the structural system of a given language. In the case of English compounds we have seen that no changes of vowel or consonant take place when an independent morpheme becomes the constituent of a compound. Exceptions to this rule are therefore indicative of formation outside the present-day stage of linguistic structure. Let us apply the same method to the analysis of suffixal derivatives.

1.3.3. What have we gained if some speakers analyse collier as ‘a man who digs coal’ (no speaker of American English would use the word collier) or connect grazier, brazier, glazier (terms hardly used in American English) with grass, brass, glass? Considering -ier as an allomorph of denominal -er we find that the phonic changes which distinguish the independent words from their forms as elements of suffixal derivatives are not those usually observed in derivation (e.g. breathy 1528, frothy 1533, earthy 1555, lengthy 1759)1. We would be acting very unwisely if we rejected such valuable diachronic help and accepted on equal terms the two derivative alternations /θ ~ δ/ (north ~ northern) and /θ ~ θ/ (earth ~ earthy). Both are still clearly discernible in a ‘descriptive analysis of words’, but only the latter is a relevant derivative feature in the system of present-day English.

1.3.4. A mere reference to quantitative occurrence will not do. In the case of derivation from English words ending in voiceless fricatives we may actually find more examples of the older type and still know that present-day English derives as stated above. Productivity of a derivative type therefore cannot be overlooked in a correct description of a linguistic system, and the linguist who neglects this particular factor will be counting ‘dead souls’ as live people2.

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1 See 4.1.32–35.
2 Zellig S. Harris, Methods in Structural Linguistics (Chicago 1951) 255: “the methods of descriptive linguistics cannot treat of the degree of productivity of elements”.
Word-formation on a native and on a foreign basis

1.4.1. Bearing in mind the bi-morphemic, i.e. two-sign character of derivatives and the ensuing opposability of both elements, it seems a little embarrassing to revert to the topic of the analysis of conceive, deceive, receive described as bi-morphemic by Bloomfield¹, Harris², and Nida³. Newman⁴ establishes such suffixal derivatives as horr-or, horr-id, horr-ify; stup-or, stup-íd, stup-ify. What are the bases horr- and stup- and what are the meanings of the suffixes? With the exception of stup-ify which by forced interpretation could be made to look like a syntagma, none of the ‘derivatives’ is analysable into two significates. In a recent article, H. Frei⁵ has again underlined the ‘présence indispensable du signifié’. The fact that we can align such formal series as con-tain, de-tain, re-tain; con-ceive, de-ceive, re-ceive does not prove any morphemic character of the formally identical parts as they are not united by a common significance. The preceding words are nothing but monemes. Conceive, receive, deceive are not comparable to syntagmas such as co-author ‘joint-author’, re-do ‘do-again’, de-frost ‘remove the frost’ the correct analysis of which is proved by numerous parallel syntagmas (co-hostess, co-chairman, co-defendant; re-write, re-hash, re-furbish; de-gum, de-husk, de-horn). If the two series con-tain, de-tain, re-tain / con-ceive, de-ceive, re-ceive, through mere syllabication and arbitrary division of sound complexes yield morphemes, why should we not be allowed to establish the similar morpheme-yielding series ba-ker, ja-ker, ma-ker / bai-ling, jai-ling, mai-ling? If we neglect content, how can we expose such a division as nonsensical? The theoretical problem of “la non-unicité des solutions possibles” has been pointed out by H. Frei⁶. In actual fact, nobody would think of making the wrong morpheme division as our memory keeps perfect store of free and bound morphemes as significant/significative relations. It is only with a certain restricted class of words of distinctly non-native origin that we fall into the error of establishing unsolvable morphemes. This leads us to a question of structural analysis I have dealt with in several places⁷.

1.4.2. If receive, deceive, conceive are matched by the substantives reception, deception, conception, this is so because Latin verbs in -cipere are anglicized as verbs in -ceive while the corresponding Latin substantives receptio, deceptio, conceptio in English have the form given above. The alteration -sumvb -sumption sb is obviously restricted to pairs corresponding to the Latin alternation -sumere vb -sumptio sb. Nobody, unless he was trying to be witty, would extend the correlative pattern to pairs of words outside the particular structural system to which the words ultimately belong. Rime with receive/ reception could not make anyone derive believe/belieption nor would the pattern consume/consumption produce boom/bumption, boom/bumption. The natural

¹ Language 209 and 242.
⁵ Critères de délimitation, Word 10 (1954), 139.
⁶ Ib. 142.
synchronic description will therefore deal with foreign-coined words on the basis of the structural system to which they belong.

1.4.3. With regard to compounding, prefixing, and suffixing, word-formation proceeds either on a native or on a foreign basis of coining. The term 'native basis of coining' means that a derivative must be analysable as consisting of two independent morphemes (in the event of a compound as rain-bow) or of a combination of independent and dependent morpheme (in the case of prefixal and suffixal derivatives as un-just, boy-hood). By word-formation on a foreign basis of coining I understand derivation on the morphologic basis of another language. In English, French, and German, to give three principal European languages, most learned, scientific, or technical words are formed on the morphologic basis of Latin or Greek. We may speak of this derivation as word-formation on a Neo-Latin basis, as Neo-Latin comprises Greek patterns as well and has frequently extended Old Greek patterns so that they are more rightly Neo-Latin than Old Greek. I will illustrate the principle by English examples.

1.4.4. There are various degrees of foreignness. 1) A word may appear as a complete alien in Neo-Latin form, as hyper-aesthesia, panopticon, panorama, post-abdomen, pre-retina / nectarium, spermarium. 2) A combination has an English form but is not analysable as a composite on an English basis. Examples are insecticide, pomiculture, spermaduct / amorphous, alogous, hypertrophy / barbate, barbellate, funambulist, pugilist. 3) A combination is derived on a Neo-Latin basis but its elements can be analysed as allomorphs of English morphemes: in an-electric, an- is considered an allomorph of α-, in scient-ist, scient- can be considered an allomorph of science. 4) A combination consists of two non-native elements which are, however, combined on a native basis, as hyper-sensitive, action-al.

1.4.5. Koziol's book does treat of ‘foreign’ suffixes without which a book on English word-formation would be unthinkable, but he never undertakes to describe derivative patterns. The problem is not even realized. “Afrz. -te (lat. -tätem) entspricht im Engl. die Nachsilbe -ty in faculty (me.), honesty (me.) . . . ferocity (1606). Neubildungen sind virtuality (1483), shrievality (1502), capability (1611) . . .” (168). We are not told by what process words which are analysable under certain conditions only (into which the author has obviously not inquired) lead to new formations. That the suffix, by the way, is not -ty (except in the case of shrievality which belongs with mayorality where the analysis is more properly sb + -alty, cp. the recent coinage squireality 1856) but -ity Koziol has not realized. At best he explains derivatives on a Neo-Latin basis as formed “nach dem Muster zahlreicher Entlehnungen” (182 and passim), yet exactly what those patterns are we never learn. But in a book in which the fundamental principle of word-formation itself, the syntagmatic character of the derivative pattern, is only half realized, it is perhaps vain to look for a distinction which concerns the morphologic structure of the significant only.

1.4.6. On principle, I have only treated those combinations which are analysable on a native basis, including, however, the Latin-coined types described in 4.16. This leaves out most combinations of group 1); they are nothing but Neo-Latin compounds or preparticle compounds in anglicized
form, with the exception of those scientific terms whose constituent elements exist as independent (learned or scientific) words, such as post-abdomen, preretina. The distinction made also excludes the types of group 2). Combinations of group 3) have been included, though they show formal peculiarities which mark them as coined on a NL morphological basis. The changes which prefix formations undergo are of minor importance, anyhow. The foreignness of words belonging to the type scientist is more in evidence, but the radical is immediately connected with the word it represents in English. For more detailed discussion see 3. 1. 5. 5ff. and 4. 1. 13ff.

Border-line cases are not wanting. I have, for instance, included among suffix formations such words as pugilist, funambulist which are not analysable on a native basis, on the ground that they show the productivity of -ist. They are suffix formations on a NL basis though the proper Latin words are pugil resp. funambulus. On the other hand, I have legitimately treated words of the type musicianer which are suffixal extensions of an earlier simple word. Another case is that of the adapting termination. An outstanding example is verbal -ate which in the majority of cases adapts actual or possible Latin verbs in -are. But it has also formed words on a native basis (as missionate, hyphenate a.o.) and is, moreover, largely connected with sbs in -ation, so I have included -ate and similar sfs which have derivative as well as adapting character (-arian, -ous etc.).

Synchronic and diachronic method

1.5.1. Two principal methods are applied in the science of language: the synchronic and the diachronic one. With regard to word-formation, the synchronic linguist would study the present-day system of formative types while the scholar of the diachronic school would write the history of word-formation.

The chief purpose of this book is synchronic: to illustrate those derivative types which characterize the present-day English linguistic system. At the same time I have made a tentative effort to describe the growth of these structurally relevant types in the past stages of the language. This explains why I have called my approach 'synchronic-diachronic'. The book is not a history of English word-formation, a task most difficult to undertake at present, anyway, as there are only a very few monographs describing the history and growth of certain types. It also follows that the reader will not find a discussion of extinct patterns of word-formation, either. The method of this book has little in common with the so-called historic method of older scholars (still followed by Henzen in his Deutsche Wortbildung), which is partly diachronic and partly comparative. These books do not give an idea of how a certain system of word-formation evolved, nor do they show what the relevant formative types were in a given older stage of the language. Least of all do we get a description of the patterns characterizing the present-day structure of the language. For a detailed account of this method see my article in Dialogues 3. 165ff., esp. 165—166.

1.6. This book is not 'structural' in the specified meaning the term has today. I have treated alternations only insofar as they have or have had
derivative character. Mere semantic correlation is not enough to establish a phonological (phonemic) resp. morpho-phonemic opposition. I see no point in (morpho-phonemically) opposing F *dossier/dorsal, oeil/oeil* (Gougenheim p. 59). Jespersen also, though not for structural reasons but because he is predominantly historically interested, contrasts derivationally unconnected pairs. One example out of the many the reader may look up for himself is the following. “Often a more Latin(ized) derivative form corresponds to a radical in originally F form: *doupe/duplication, noble/nobility, simple/simplicity, sober/sobriety.*” (VI. 24. 94.) The essential point for the French as well as the English pairs is that the respective members are coined on two heterogeneous formative bases, the first on a native, the second on a Latin basis of coining. Semantically they are connected, to be sure, but in a book on word-formation where we deal with derivative patterns, such oppositions are of little value. For the speaker, *dine* and *dinner, maintain and maintenance* and many others are semantically connected, but a derivative connection has not developed out of such pairs, so their opposition is not relevant to word-formation.

I disagree with analyses like the one Bloomfield gives for the word *duchess* (the whole passage is too long for quotation, but it should be read in its entirety: ch. 10. 6, p. 167f. in Language): “The complex form *duchess* [dju'tjs] consists of the immediate constituents *duke* [dju wk] and -*ess* [is] . . . The [juw] of *duke* is replaced by [ʌ], and the [k] by [tʃ].” Such analyses falsify the actual morphologic relations. The reader is apt to get the misleading idea that there is a morpho-phonemic relation as of /jʌ ~ ʌ/ resp. /t ~ tʃ/ in English.

Bally’s descriptive method also cannot do justice to the problem of word-formation. Bally is really concerned with the significate rather than the significant (in contrast with Bloomfield whose primary interest is the significant) which leads him to treat structurally different words (*cheval/chevaucher 184, équestre/cheval 181*) as connected: “*équestre* a un radical échangeable avec *cheval*” (181). It does, but only from the standpoint of the significate. The term “transposition” cannot be fruitfully applied to word-formation, unless we keep strictly apart the two planes of significant and significate.

**The importance of types**

1. 7. Whatever mankind creates in the way of civilization is based on forms. There are forms of art, literature, forms of social life etc., and it is these which are characteristic of a certain structural system. The existence of individual creations outside established patterns is of course not denied. But the isolated does not count as representative of the structural system. This is why we have treated word-formation under the aspect of types.

**The scope of this book**

1. 8. My intention has been not to give the fullest possible list of examples, but to offer a description of the trends of word-formation by a picture of the various formative types. I have included neologisms as far as is possible and necessary. I have certainly left out many words which seem important to this
or that critic. My word lists do not pretend to be exhaustive. To be complete is impossible, anyhow, as new words are coined every day. Discrimination has not always been an easy task. In American English, there is a feverish production of words. A look at American magazines such as Life and Time or at the new coinages discussed in the linguistic journal American Speech gives the impression that there is a mass production of new words growing from day to day and that the language is developing rapidly. As a matter of fact, many of those neologisms are coined for the sheer pleasure of coining, as stunts. Newspapers, radio speakers, comic-strip artists play a great role in the production of words. Some papers seem to make it a point to present the public with a couple of new words in every number issued. Only a few finally prevail. There is the case of -ine words which came in during the middle 80's, as actorine, chorine, doctorine, dudine, knitterine, coined after heroine (see Asp 3 1927—28, 368 and 447). But all these words are now obsolete, if they ever acquired currency. Countless grotesque words in -itis are incessantly coined, but none of them has so far passed into StAE. Their occurrence in newspapers, as I have already pointed out, proves nothing at all. Newspapers have a language of their own.

**Arrangement of prefixes and suffixes**

1.9. As prefixes do not belong to a definite class of words, I have made no subdivisions at all, but given them in their alphabetical order. Koziol subdivides into native and foreign prefixes, while Jespersen has the inconsistent subdivisions 'Negative and related prefixes' (i.e. the criterion is one of meaning), 'Prepositional prefixes' (i.e. the criterion is one of function), 'Prefixes concluded' (those prefixes which fit neither, i.e. there is no criterion at all). As for suffixes, Koziol treats them partly under the aspect of function, partly of meaning, partly that of supposed original function only. In this way, -ster comes to be dealt with under the heading 'feminine suffixes' where no one would look for it; -er is discussed both under the headings 'masouline personal suffixes' and 'names of things'; -age, -dom, -ment are listed under 'concrete nouns' as well as 'abstract nouns'; such suffixes as -an, -ant, -ese appear both in the chapter 'substantival suffixes' and 'adjectival suffixes', and so on. To avoid overlapping of treatment in different chapters I have dealt with suffixes as well as prefixes in alphabetical order. I see no reason why a treatise on PE word-formation should be subdivided according whether a morpheme is native or not, in the latter case again according to French, Greek or Latin origin. Nor do I see the characteristic feature of a suffix in its sounds (the older grammars and Jespersen). That, for instance, a suffix contains a sibilant does not justify a chapter in which -ess, ness, -ish, -ous etc. are treated together (Jespersen). At the end of the book, however, the reader will find an index where the prefixes and suffixes are arranged according to their functions and principal sense groups.

1 For a full treatment of American tendencies in the coining of words see Krapp and (more extensively) Mencken, for shorter surveys L. Pound (Research in American English, Asp V. 359ff. (1930; reprint) and American English Today, repr. from Studies for William A. Read, Louisiana State University Press, 1940, 109ff.).
II. COMPOUNDING

The term 'compound'

2.1.1. When two or more words are combined into a morphological unit, we speak of a compound. The principle of combining two words arises from the natural human tendency to see a thing identical with another one already existing and at the same time different from it. If we take the word rainbow, for instance, identity is expressed by the basic bow: the phenomenon of a rainbow is fundamentally a bow. But it is a bow connected with the phenomenon rain; hence the differentiating part rain. The compound is thus made up of a determining and a determined part. In the system of languages to which English belongs the determinant generally precedes the determinatum. The types which do not conform to this principle are either syntactical compounds (e.g. father-in-law) or loan-compounds (e.g. MacDonald, Fitzgerald) with the "inner form" of a non-English language. There is a very interesting article by Stefán Einarsson, Compounds of the mann-skratte type. Icelandic mann-skra means 'devil of a man' and thus represents a type of combination in which the determinatum precedes the determinant. It is worthy of note, however, that all those compounds have an emotional character which reminds one of emotional forms of poetic word order in German, used in address only: Brüderlein fein; ach Mutter mein; o Jesulein stib. It would thus appear that the type of inverted word order is somehow tied up with emotional motivation. We observe the same sequel with derivatives by appreciative suffixes, endearing, derogatory, and otherwise; dadd-y, G Väter-chen, blu-isk. This is only a statement of a phenomenon, not an explanation. The determinatum is the grammatically dominant part which undergoes the changes of inflection. On the other hand, its semantic range is considerably narrowed as the second-word of a compound, determined as it is by the first-word.

Compounds with a zero morpheme

2.1.2. A compound, we have said, has two constituent elements, the determinatum and the determinant. There are, however, many combinations which do not seem to fulfill this condition. The essential part of the determinatum as a formal element is obviously missing in such types as pickpocket, runabout, overall, blackout, dugout, the bahuvrihi types hunchback, paleface, five-finger, scatterbrain. A pickpocket is neither a pick nor a pocket, a hunchback is neither a hunch nor a back, and so on. In all of the preceding combinations the basis, the determinatum, is implicitly understood, but not formally expressed. The combinations are compounds with a zero determinatum (also called exocentric compounds, as the determinatum lies outside the combination).

\(^1\) Studies in Honor of Albert Morey Sturtevant, University of Kansas Publications, Humanistic Studies No. 29, Lawrence 1952, 47—56.
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Synthetic compounds

2.1.3. A similar concept underlies combinations of the type householder. The analysis of householder is parallel to that of pickpocket: 'one who holds a house'. The difference is that householder has a formal determinatum (-er) whereas pickpocket has not. However, the conceptual analysis clashes with a word-forming principle in English. Householder cannot be considered a suffixal derivative from the basis household in the way that old-timer or four-wheeler are derived from old time(s) resp. four-wheel(s), as there is no compound verb type to household in English. The modern type to brainwash is of quite recent development and is not nearly so well established as the type householder, which is very old (in its present form, extended by -er, it goes back to late Old English while the original OE type man-slaga 'man-killer' is Indo-European; cp. L armiger, signifer, artifex). The idea of verb/object relation could combine with the concept of agent substantive only by way of joining an agent noun created ad hoc as a pseudo-basis to a common substantive. We are thus faced with the fact that an analysis which considers the underlying concept only may be disavowed by the formal pattern. The formative basis of combinations of the type householder is the agent substantive, however artificial the analysis may sometimes appear. A skyscraper, though not naturally analysable as 'a scraper of the sky' but '(a building which) scrapes the sky', from the formative point of view must be understood as a compound with scraper as the basis. This type of compound therefore is not the primary one which arises from combining two fully independent common substantives (as in the type rainbow). Because of their 'forcible' character, such compounds have been termed synthetic compounds (in German they are called Zusammenbildungen).

2.1.4. Parallel to the type householder are the types housekeeping (sb) and heartbreaking (adj). The second-words of such combinations do not often exist as independent words: holder, keeping, breaking are functional derivatives, being respectively the agent sb, the action sb, and the first participle of the underlying verbs. Strictly speaking, they should not figure in a dictionary, which is an assemblage of semantic units. The lexical value of, say, the word crasher is nil, as the word represents nothing but the aspect of actor of the verb crash whereas gate-crasher is a lexical unit. In the same sense the second elements of most compound impersonal substantives of the type housekeeping and of most compound participles of the type heartbreaking are semantic units only in conjunction with their first-words. In a similar way, other combinations with participles as second-words are synthetic compounds: cooking, going, working are not adjectives, but preceded by adjectives or locative particles they form compounds (quick-cooking, easy-going, hard-working / forthcoming, inrushing, outstanding). Eaten, bred, borne, baked, flown, spread are nothing but participles, but moth-eaten, home-bred, air-borne / fresh-baked, high-flown, widespread are compounds.

2.1.5. The non-compound character of extended bahuvrihi combinations is manifest. Hunchbacked, palefaced, five-fingered, knock-kneed are not analysable into the immediate constituents hunch + backed, pale + faced etc.; the
determinatum is always -ed while the preceding compound basis is the determinant. Extended bahuvrihi adjectives therefore are suffixal derivatives from compounds or syntactic groups. Exactly parallel are combinations of the types old maidish and four-wheeler.

Compounds with composite constituents

2.1.6. One of the constituent members of a compound may itself be a compound. In German, the determinant as well as the determinatum occur as compounds (Rathaus-keller, Berufsschul-lehrer, Stadt-baurat, Regierungsbaumeister). The regular pattern in English, however, is that of the determinant being a compound (aircraft-carrier, traffic signal-controller, flower pot-stand, plainclothes-man, milktruck-driver etc.) whereas in the event of a compound determinatum the whole combination usually becomes a two stressed syntactic group (night watchman, village schoolmaster, house doorkeeper). The two regular cases of a compound determinatum in English I can think of are substantives whose second constituent is a preparticle compound, as baby outfit, oil output, and substantives whose second element is the semi-suffixal determinant -man (with a reduced vowel), as in traffic policeman, hat salesman.

The criterion of a compound

2.1.7. What is the criterion of a compound? Many scholars have claimed that a compound is determined by the underlying concept, others have advocated stress, some even seek the solution of the problem in spelling. H. Paul says that “die Ursache durch welche eine syntaktische Verbindung zu einer Zus. wird, ist darin zu suchen, daß sie ihren Elementen gegenüber in irgendeiner Art isoliert wird”¹. By isolation he understands difference in meaning from a syntactic group with the same words, and treats as compounds such phrases as dicke Milch, das goldene Vlies which are what Bally terms ‘groupes locutionnels’. H. Koziol² holds that the criterion of a compound is the psychological unity of a combination, adding that there “seems to be” a difference of intonation between a compound and a syntactic group which it is, however, difficult to describe. W. Henzen³ who discusses at some length the diverse definitions, decides on “the impossibility of a clear-cut distinction” between a compound and a syntactic group and hesitatingly proposes to consider a compound as “den mehrstammigen Ausdruck einer Begriffseinheit, der zusammengeschrieben wird”. This is a very weak definition, and he admits that the German separable verbs do not fit it. Bloch-Trager⁴ do not treat the question in detail; they call a compound “a word made up wholly of smaller words”, specifying that both of the immediate constituents must be free forms.

² pp. 46—47.
³ p. 44.
⁴ B. Bloch-G. L. Trager, Outline of Linguistic Analysis (Baltimore 1942) 54, 68.
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2.1.8. Stress also has been advocated as a criterion. "Wherever we hear lesser or least stress upon a word which would always show high stress in a phrase, we describe it as a compound member: ice-cream 'a·s·krijm is a compound, but ice cream 'ajs·krijm is a phrase, although there is no denotative difference of meaning."\(^1\) Kruijtinga\(^2\) makes no difference at all between a compound and a syntactic group, at the same time feeling the need to maintain the traditional concept of compound. He defines the compound as "a combination of two words forming a unit which is not identical with the combined forms or meanings of its elements". In a similar way, Bally defines the compound as a syntagma expressive of a single idea\(^3\). Jespersen also introduces the criterion of concept and rejects Bloomfield's criterion of stress. "If we stuck to the criterion of stress, we should have to refuse the name of compound to a large group of two-linked phrases that are generally called so, such as headmaster or stone wall." This is certainly no argument, nor is the objection that words such as sub-committee, non-conductor have forestress according to Jones, but level stress according to Sweets. The first elements are not independent morphemes, anyway. For this reason it is wrong to argue that "the prefixes un- (negative) and mis- are often as strongly stressed as the following element; are they, then, independent words?"\(^4\) If it rains, the ground becomes wet. But if the ground is wet, we are not entitled to the conclusion that is has rained. As for the criterion of stress, we shall see that it holds for certain types only.

2.1.9. That spelling is no help in solving the problem I will add for the sake of completeness only. A perusal of the book Compounding in the English Language\(^5\), which is a painstaking investigation into the spelling variants of dictionaries and newspapers, shows the complete lack of uniformity. The fact that a compound-member cannot serve as a constituent in a syntactic construction is no criterion of a compound. Bloomfield (Language p. 232) argues that "the word black in the phrase black birds can be modified by very (very black birds), but not so the compound-member black in blackbirds". This argument holds for phrases as well. We could not modify the first elements of black market, Black Sea by very, yet the phrases are not compounds, as they do not enter the stress type of blackbird. A similar argument is used by Bloch-Trager (Outline of Linguistic Analysis 66) who point out that we cannot insert any word between black and bird as members of the compound blackbird. This is correct, but neither can we split up the group black märk which is a double stressed syntactic group with a specified meaning.

2.1.10. For a combination to be a compound there is one condition to be fulfilled: the compound must be morphologically isolated from a parallel

\(^1\) L. Bloomfield, Language (New York 1933) 228.
\(^3\) Ch. Bally, Linguistique générale et linguistique française, Second edition (Bern 1944) 94.
\(^4\) MEG Part VI. Morphology (Copenhagen 1942) 8. 12.
\(^5\) A. M. Ball, Compounding in the English Language (New York 1939) and The Compounding and Hyphenation of English Words (New York 1951).
syntactic group. However much the Holy Roman Catholic Church or the French Revolution may be semantic or psychological units, they are not morphologically isolated: they are stressed like syntactic groups. Blackbird has the morphophonemic stress pattern of a compound, black market has not, despite its phrasal meaning; the latter therefore is a syntactic group, morphologically speaking. Stress is a criterion here. The same distinction keeps apart the types stronghold and long wait, the types sharpshooter and good rider, the types bull's-eye and razor's edge, the types writing-table and folding door.

2.1.11. On the other hand, there are many combinations with double stress which are undoubtedly compounds. Most combinations with participles as second-words belong here: easy-going, high-born, man-made. We have already pointed out their synthetic character. Being determined by first-words which syntactically could not be their modifiers, they must be considered compounds. The type grass-green has two heavy stresses, but again the criterion is that an adjective cannot syntactically be modified by a preceding substantive (the corresponding syntactic construction would be green as grass). The adjectival type icy-cold is isolated in that syntactically the modifier of an adjective can only be an adverb. The corresponding coordinative type German-Russian (war) is likewise morphologically distinct. The corresponding syntactic construction would be typified by long, grey (beard), with a pause between long and grey, whereas the combination German-Russian is marked by the absence of such a pause.

Factors conducive to compounds

2.1.12. The most important type in which stress is morpho-phonemic is rainbow. As it has been the object of much discussion, it will here be given a somewhat detailed treatment. English has at all periods known and made use of this Germanic type of word-formation. The possibility of combining substantives is today as strong as ever. On the other hand, English has, for at least three centuries, been developing the syntactic group of the type stone wall\(^1\) which has two stresses. While the coining of forestressed compounds continues, a new syntactic type has arisen which challenges the privileged position of the type rainbow. Though the co-existence of two types of substantive—substantive combinations has long been recognized, the conditions under which a combination enters the compound type rainbòw or the syntactic group type stone wall do not seem to have been studied. Sweet, in his chapter on the stressing of compounds\(^2\), has a few remarks on the subject, but otherwise the problem has not received attention. The following, therefore, can be an attempt only.

2.1.13. The most important factor is the underlying concept. Some concepts are invariably tied up with forestress pattern. The concept may be grammatical: when the verb/object or subject/verb relation is present, the combination receives forestress. Therefore the following are types of stable

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1 O. Jespersen, MEG I. 5. 33—37 and II. 13.
2 H. Sweet, A New English Grammar (Oxford 1892) 889—932.
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compounds: householder (skyscraper, doorkeeper, caretaker), housekeeping (sightseeing, mindreading, childbearing), rattlesnake (popcorn, sobister, crybaby). The first-word is the object in the verbal nexus substantives householder and housekeeping. Combinations in which the underlying concept is the same though the formal type be different follow the pattern: geography teacher, art critic, car thief, related constructions such as tea merchant, cloth dealer, leather worker, steel production, traffic control, money restrictions, fur sale, grain storage. If the second-element has acquired the status of an independent word, the predicate/object nexus may have come to be blurred, as in party leader, funeral director which are stressed as syntactic groups. Again, a combination may step out of line, either because the verbal nexus is blurred or because the combination is too long: contract violations, business administration, concert performance always have two stresses.

2. 1. 14. As a rule, combinations in which a verbal nexus is expressed have forestress. Most combinations with a verbal stem therefore are compounds: showroom, payday, dance floor, playboy, sweatshop. But in cases where the verbal stem is used in adjunctal function, i.e. has become a quasi-adjective, equivalent to a second participle, a situation similar to that in stone wall has arisen: the two constituents receive full stress. We say roasting beef, roasting mutton etc., and waste paper, waste land are often heard though many speakers always give to these combinations the compound stress. The case is the same with combinations whose first constituents are -ing forms of a verb. Most combinations of the type writing-table are compounds because the underlying concept is that of destination (looking-glass, frying-pan etc.). But when the verbal -ing is apprehended as an adjunct, i.e. a participle, the combination is susceptible of being treated as a syntactic group: Flying Dutchman, flying saucers, revolving door. However, other combinations have forestress owing to the idea of implicit contrast: humming-bird, with the frequent constituent bird, receives forestress to distinguish it from blackbird, bluebird, mocking-bird.

2. 1. 15. Other relations are of a purely semantic nature. The following cases involve forestress pattern. The underlying concept is that of purpose, destination: theater ticket, freight train, bread basket, paper clip, reception room, concert hall, windshield, toothbrush.

The significate of the second-word is naturally dependent on that of the first-word: windmill, watermill, water clock, motorcar, motorboat, steam engine, mule cart, sea bird, water rat, lap dog.

The first-word denotes the originator of what is expressed by the second-word: rainwater, rainbow, bloodstain, birth right, pipe smoke, smoke screen.

The underlying concept is that of resemblance: blockhead, bellflower, goldfish, horse-fish, iron-weed, silkweed, wiregrass.

2. 1. 16. There are other, quite external factors conducive to forestress. The frequent occurrence of a word as second constituent is apt to give compound character to combinations with such words. The most frequent word is probably man (the reduction of the vowel and the loss of stress of man as a second-word is another result of the same phenomenon): policeman, congressman, gunman, postman, milkman. A few other words which are frequent as second constit-
tuents of compounds are ware (houseware, hardware, silverware), work (woodwork, network, wirework), shop (giftshop, candyshop, hatshop), store (bookstore, drugstore, foodstore), fish (bluefish, goldfish, jellyfish). The forestress of such combinations is thus due to implicit contrast: each -man, -shop, -store word is automatically stressed on the first member to distinguish the combination from others of the same series. The case of -girl combinations is particularly interesting in this connection. Appositional combinations are usually syntactic groups with two stresses in English (boy king, woman writer, gentleman-farmer), but servant girl, slave girl, peasant girl, gipsy girl have contrastive forestress.

Syntactic groups

2.1.17. The criterion of the underlying concept may now be applied to the syntactic group type stone wall. The grammatical concept which involves syntactic stressing is that of adjunct/primary. Most coordinative combinations, additive as in king-emperor, secretary-stenographer, or appositional as in gentleman-farmer, prince consort have two heavy stresses. Here belong combinations with sex- or age-denoting first constituents as man, woman, boy, girl, baby, embryo except that, owing to contrast, boy friend, girl friend, manservant, maidservant have developed forestress. (It is perhaps interesting to point out that the sex-denoting pronouns he, she, as in he-goat, she-dog, form forestressed compounds, despite Sweet 904.) Combinations with first constituents denoting relational position, as top, bottom, average, brother, sister, fellow likewise have the basic stress pattern of the syntactic group under discussion.

2.1.18. Combinations with a first member denoting material are treated as adjunct/primary groups and receive two stresses: gold watch, silver chain, steel door, iron curtain, cotton dress, silk stocking, leather glove, straw hat, paper bag a.o.

2.1.19. Incidentally, the treatment of adjunct/primary combinations consisting of two substantives has a parallel in Turkish. Determinative substantive + substantive combinations all receive the determinative group suffix whereas coordinative combinations made up of two substantives do not. Turkish morphologically opposes kadın terzi-si (kadın ‘woman’, terzi ‘tailor, dressmaker’, -si = the determinative group suffix) ‘women’s tailor’ to kadın terzi ‘(woman) dressmaker’. Coordinative groups in both languages are treated like syntactic groups of adjective + substantive.

Some borderline and other cases

2.1.20. Often two contradictory principles are at work; then one has to give way. Though material-denoting first constituents usually make a combination into a syntactic group, a frequently used second-word may obviate the result, as in tinware, ironware, silverware, or contrastive stress may interfere with the normal two-stress pattern of coordinative combinations, as in fighter-bomber, girl friend, boy friend.

2.1.21. When a substantive can also be interpreted as adjective, changed analysis may lead to change in the stress pattern. Though a hospital can be neither mental nor animal, we stress mental hospital, animal hospital, as

2 Marchand, The categories
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against sick room, poor house. Similar shifts occur also in a more fully inflected language such as German: ein deutsches Wörterbuch, ein lateinisches Heft, die französische Stunde.

2.1.22. Many forestressed compounds denote an intimate, permanent relationship between the two significates to the extent that the compound is no longer to be understood as the sum of the constituent elements. A summer-house, for instance, is not merely a house inhabited in summer, but a house of a particular style and construction which make it suitable for the warm season only. Two-stressed combinations of the type stone wall never have this character. A syntactic group is always analysable as the additive sum of its elements. It is an informal, non-committal meeting, never a union of the constituents. This is a great advantage English enjoys, for instance, over German. German cannot express morphologically the opposition permanent, intimate relationship ~ occasional, external connection instanced by summer-house ~ summer résidence, Christmas treè ~ Christmas traffic. English, therefore, has acquired a substantive + substantive combination of a looser, casual kind for groups in which an intimate, permanent relationship between the significates is not meant to be expressed: field artillery, world war, country gentleman, village constable, parish priest, city court, state police, home town, district attorney and countless other combinations.

2.1.23. On the one hand, the possibilities of coining compounds are much more restricted than in German where any occasional combination of two substantives automatically becomes a onestressed compound (see 2.1.26). On the other hand, English compounds are much closer morphologic units which cannot be split up the way German compounds are. In German, it is possible to say, for instance, hand- und elektrische Modelle (Weltwoche, Sept. 26, 1947), clipping the rainbow type compound and leaving the adjective/substantive syntactic group intact. However, in English as well as in German, serial combinations like house and shopowners, wind- and watermills occur (Bloomfield, Language, p. 232 restricts them to German).

2.1.24. It is nevertheless often difficult to tell why in one case the language has created a compound while in another it has coined a syntactic group. Conceptually, collège président is in about the same position as opéra directeur, but the first combination is a syntactic group, the second a compound. Form is one thing, concept is another. On the other hand, the same morphologic pattern does not involve the same degree of semantic unity: lipstick is a closer unit than reception room. The morphologic criterion of a compound enables us to do justice to both form and concept.

Compounding and stress

2.1.25. A few words are required about the problem of stress with regard to compounding. With Stanley S. Newman 1 we accept three degrees of phonemic stress: heavy stress (marked ‘’), middle stress (marked ‘’), and weak stress

(which is traditionally and perhaps more appropriately called absence of stress). As a combination of two independent words, basically speaking, a compound combines two elements which are characterized by presence of stress. Absence of stress in general indicates grammaticalization of a morphemic element (as in police-man, Mac Dónald, Fitz-gérald). The determinant has the heavy, the determinatum the middle stress. Thus the usual pattern is ’‘ (e.g. rainbow) which is also followed by combinations with a zero determinatum (pickpocket). All substantival compounds show this pattern, with the exception of those whose first element is the pronouns all or self. Such compounds have double stress (e.g. all-soil, all-creator, self-respect, self-seeker). Of adjectival compounds, only two types have the stable stress pattern heavy stress/middle stress: the type color-blind (i.e. adjs determined by a preceding substantive, unless the underlying concept is that of emphatic comparison, as in grass-green, where double stress is the rule) and hearty-breaking. All other adjectival types are basically double stressed.

2.1.26. Bloch-Trager\(^1\) posit four degrees of phonemic stress: loud stress, reduced loud stress, medial stress, and weak stress. They find reduced loud stress on the adjunct of a syntactic adjunct/primary group (old man) as well as on second-words of forestressed compounds (blackbird, elevator-operator) which are obviously not on the same level. The reduced stress on old is rhythmically conditioned by the position of old before a likewise heavy stressed word to which old stands in the subordinate relation of adjunct. This is a syntactic phenomenon of stress reduction. No change of the underlying concept is involved in a shift from reduced to loud stress as no oppositional stress pattern ’‘ ’‘ exists in the case of adjective/substantive combinations. So old man is really a free variant of old man. Blackbird is different: we cannot oppose blackbird to black bird without changing the underlying concept. The stress pattern ’‘ of blackbird is morpho-phonemic. The case of elevator-operator is similar. A combination of the type house-holder (discussed 1.3) implies the stress pattern ’‘ as morpho-phonemically relevant. Though in the particular case of elevator-operator we cannot oppose the heavy/middle stress to a heavy/heavy stress combination, we can conceive of other pairs where change of stress implies change of the underlying concept, as French teacher ‘a teacher of French’ ~ Frérench teácher ‘a teacher who is French’ red hunter ‘one who hunts reds’ ~ réd húnter ‘a hunter who is red’, fat producer ‘one producing fat’ ~ fát producé ‘a producer who is fat’.

We must therefore assume a relevant degree of stress which distinguishes the phonemic non-heavy stress of blackbird and elevator-operator from the non-phonemic non-heavy stress of old man. While we interpret the reduced loud stress as a positional variant of the heavy stress, we must consider the phonemic secondary stress of bird and operator as a middle stress. On the other hand, the degree of stress on the third syllable of independent elevator and operator is not different from that on bird in blackbird: in either case we have a full middle stress. When these words become second elements of compounds, the intensity of the full middle stress is lessened and shifted to a light middle stress (which, for the sake of convenience, I will here mark ‘): elevator operator. This light

\(^1\) B. Bloch-G. L. Trager, Outline of Linguistic Analysis (Baltimore 1942) 48.
middle stress is non-phonemic. We interpret it as the rhythmically predictable form assumed by the full middle stress in a position before or after a morpho-phonemic full middle stress. In composition, it occurs chiefly with compounds of type *aircraft-carryer* on the second-word of the determinant, the full middle stress being morpho-phonemically reserved for the determinatum. This full middle stress on the determinatum is morpho-phonemic as is also manifest in the behavior of German compounds: those having a compound determinant are stressed as in *Rathaus-keller* whereas those with a compound determinatum are stressed as in *Stadt-baurei* or *Reichs-innenminister* (the latter is the common pattern rather).

Compounds not dealt with in this book

2.1.27. Compounding occurs in all word classes. There are compound substantives, adjectives, verbs, pronouns, and particles (conjunctions and prepositions). The strongest group is that of substantives. Next come compound adjectives, then verbs. There is a small group of compound pronouns (the pronominal adverbs included), conjunctions and prepositions, which is naturally restricted. As compounding here serves grammatical rather than lexical purposes, we have not dealt with them.
COMPOUND ENDOCENTRIC SUBSTANTIVES

2. 2. 1. Type rainbōw

A sb is determined by the stem form of another sb. The type goes back to OE, and in PE there are a good number of words from the OE period (though some of them are archaic now) as almsman, bell-house, boxtree, breastbone, bridgeward, deathbed, deathday, doorway 'doorkeeper', handbook (partly), hazelnut, headache, heartache, mill-house, mill-wheel, pepper-corn, rainbow, raindrop, rainwater. From the ME period are recorded alewife, alms-house, armhole, bagpipe, bedchamber, bedclothes, bedside, bedstraw, bedtime, beehive, birthday, bloodhound, horse-litter, schoolmaster, swordfish, water-mill, water-pipe a.o. Later are arrow-head, bedfellow, buckskin, horsemill, pothook, ostrich-feather (15th c.), apron-string, assweed, asshad, bread-basket, birthright, guest-chamber, water-rat a.o. (16th c.), air-vessel, arrow-root, backplate, bearberry, bearskin, birthnight, brushwood, horsewhip, wolf-dog, water-clock a.o. (17th c.), barmaid, arrow-grass, bane-berry, case-knife, horse-dog, moon-flower, water-bed, water-closet a.o. (18th c.), airship, airway, armor-plate, beam-tree, bean-feast, border-land, cock-eye, rifle-range, mortarboard, pot-pie, traction-engine a.o. (19th c.), mothercraft, lipstick, aircraft, frogman, airman, airplane, floodway a.o. (20th c.). It is needless to say that this is a small collection only, as obs are formed in practically unlimited number.

2. 2. 2. The most frequent second-word is probably man which has been in use from OE times. To the OE period go back chapman ‘dealing-man’, poet. joeman, arch. gleeman, headman, obs. herdman, landman, obs. lodeman ‘pilot’, seaman, shipman, tithingman, workman. From ME times are recorded bell-man ‘town-crier’, bondman, bowman, countryman, footman, gallieyman, hackney-man, hangman, horseman, husbandman ‘farmer’, keelman, liegeman, maitman ‘maitster’, peterman ‘fisherman’, plowman, shearmen ‘one who shears woolen cloth’, slaughterman ‘executioner’, spearman ‘soldier armed with a spear’, timberman, watchman, woodman (in various senses). From the 15th c. are ferryman, lockman, oilman. From the 16th c. are recorded bagman, billman, boatman, bookman ‘scholar’ clergyman, coalman, coachman, fisherman, glass-man ‘dealer in glass’, harvestman, lackman, postman, potman, presman, schoolman, scytheman, sheepman ‘shepherd’, shopman, silkmale, tencerman; from the 17th c. brinkeman, chairman, dartman ‘soldier armed with a dart’, fireman, flagman, highwayman, liveryman, moorman, nightman, nurseryman, pitman, shoremale, tallyman, tinman ‘tinsmith’, warehouseman; from the 18th c. barman ‘one who makes metal bars’, dairyman, dustman, flash-man, rifleman, showman,

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signalman, tolkman, toyman. The 19th c. was very productive, to it belong barman (in the current sense), batman, cabman, congressman, flyman, gasman, hackman 'driver of a hack or cab', hillman, infantryman, lineman, motorman, pass-man, pieman, pikeman, policeman, prizeman, stockman 'stock-farmer', and many others formed ad hoc.

As a second constituent -man usually appears in the reduced form [mən], except in cbs of a more or less occasional character, such as ambulance man, elevator man, weather man. The reduced form is, of course, unstressed whereas the form [mən] has a middle stress.

2. 2.3. The plural form as first-word in cpds chiefly occurs when there is no sg form, as in clothes-brush, -basket, -horse, -line, -pin, -press, savings-bank, goods train. The plural is, however, very common in syntactic phrases, especially in long official terms, as in the United Nations assembly (for illustration see Jesp. II. 7. 2).

2. 2.4. As to the notional side of these cpds, the relations in which the two sbs may stand to each other are manifold. Comparison is the basis in blockhead, bell-flower, goldfish, silverfish, horsfish, iron-weed, silver-seed, silkweed, wiregrass. The material a thing is made of is expressed in tinware, ironware and other -ware cbs, waxwork, network etc. Purpose relation we have in gunpowder, keyhole, birdcage, book-case, raincoat, battleship, horseshipp, bread-basket etc., place relation in cpds as water-horse, water-rat, water-nymph, garden-party, headache. The idea of time underlies cpds such as eveningsong, nightclub, nightmare, moon-flower. But it is no use trying to exhaust the possibilities of relationship; many cbs defy an indisputable analysis. It may be that we have instrumental relation in footprint, handwriting (Jesp. VI. 8. 22), but it cannot be proved. We will always try to classify, but it should be borne in mind that the category of compounding is not one that fills the need for classification. Whether a nightshirt is 'a shirt for the night' or 'a shirt worn at night' is quite unimportant. In forming cpds we are not guided by logic but by associations. We see or want to establish a connection between two ideas, choosing the shortest possible way. What the relation exactly is, very often appears from the context only. Airmail is 'mail carried through the air', a gasmask is 'a mask used for protection against gas', an airport 'a port for airplanes'. Shortness takes priority over clearness. Words are different in different situations: a finger bowl is 'a bowl for the fingers', a fingernail is 'a nail of the finger', a finger post 'a guide post bearing a finger index', a fingerprint 'a print, an impression made by the fingers', finger waves are 'waves produced by the help of the fingers'. Thus we have five different relations with one and the same first-word. One and the same cb even may signify several things and accordingly have several notional bases: a water-bed may be 'a stratum through which water percolates' or 'a bed prepared on a water mattress'. Theoretically, several others are possible, though not actually in existence. Cpds with man for a second word naturally denote 'a man connected with ...' (usually by professional occupation).

2. 2.5. One relation is usually avoided, namely that underlying the type pathway. The second-word is the genus proximum while the first-word is the
differentia specifica. As a rule, such cbs are avoided in educated speech, as there is something tautological about them. Common are cbs with tree for a second-word, as oak-tree, palm-tree, plane-tree, perh. on the analogy of apple-tree where the notional basis is different. Roadway 1600 was perhaps coined as the counterpart of pathway a 1536, the former being the small, the latter being the riding (= road)-way. Pebble-stone c 1000 is the original while pebble c 1290 is a clipping of it. Pussycat 1837 and older puss cat 1565 may belong here (puss 'cat' a 1530), if the cb is not rather a cpd of the tomcat type, puss understood as a jocular proper name. A translation cpd is court-yard. OE cbs such as gang-weg 'way', megen-creft 'strength', holt-wudu 'wood, forest' word-wide 'speech' are poetical forms and certainly not mere tautologies. A sentence like hie megenes creft minne cudon (Beo. 418) would not otherwise be possible. In uneducated speech, cbs of the type are much more frequent. A few instances are trout-fish, tumbler-glass, viper-snake, wench-woman, yacht boat, cur dog, engineer-man, witch woman, widow woman (found with many more in Harold Wentworth, ADD s.v. redundancy). A full list of tautological compounds in OE alliterative poetry is given by Carr 334—337.

2. 2. 6. Outside the regular stress pattern is mankind in the sense 'the human species' while it is forestressed in sense 'men', as distinguished from 'women'. In England, the cb head-master also usually has end stress whereas it has the double stress of a syntactic group in American English. The word mankind (1300) was formerly always forestressed. It must then have acquired the group character and stress type of stone wall to shift to end stress. It is also worthy of note that right from the start there existed both mankind and man's kind (both cbs in Cursor Mundi for the first time) which leads us to suppose that mankind was apprehended as a syntactic group, too, so the subsequent shift to syntactic group stress was quite normal.

2. 3. 1. Types fighter-bomber / slave girl

Two sbs may form a group of notionally coordinated members, either as an additive group, like fighter-bomber 'a plane which is both fighter and bomber', or as an appositional group, like slave girl 'a girl who is a slave'. The number of cpds of this type is small in English, as the tendency is to treat cbs based on a coordinative relation as syntactic groups. Therefore, many cbs of the coordinative type are mere adjunctal cbs of an ad hoc character, to be treated in syntax, while others, which represent close semantic units, are dealt with in the chapter "Phrases".

2. 3. 2. Miss Hatcher (see 2. 23. 3—6) seems to me to overstress the influence of Neo-Latin. That the Latin-coined cbs go back to NL is evident, but I doubt whether the types king-emperor and fighter-bomber owe much to Neo-Latin. The comparatively late appearance of most of the cbs does not necessarily go to prove that they were coined in the wake of Neo-Latin compounds. Medieval Latin is certainly responsible for MHG muotermeit, E god-man 1559. And then, there are early cbs, as merchant-adventurer 1496—97, merchant-leech 1402, merchant-tailor 1504 not to speak of the appositional cbs, such as knave-child 1175, knight-bairn c 1205, knave-bairn 1300, man-child 1400, priest-hermit
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c 1440 which may have played a part in the growth of coordinative constructions, all the more as the line between additive and appositional obs cannot always be clearly drawn.

I would also like to point to the great number of copulative cpds in OE poetry (āgendfrēa ‘lord and owner’, hlēdryhten ‘lord and protector’ etc., see Carr 328—329) of which werewulf was probably the only word commonly used, just to suggest that the pattern did exist in linguistic thought and perhaps helped to produce the above obs knave-child etc.

2.3.3. For reasons pointed out above (2.1.17), coordinative forestressed cpds are not numerous in English. Except for a few combinations, such as roller-coaster, panty-girdle, fighter-bomber there are no additive examples. Other obs belong to the appositional type slave girl ‘a girl who is a slave’, as servant girl, peasant girl, washerman, washerwoman (bondman, bondwoman, bondmaid are historically the same type). The reverse type with sex-denoting first-words we have in boy friend, girl friend, man-child, manservant, maidservant. According to Carr (327) the latter type was the regular one in OE.

2.3.4. Scholars are not agreed upon the question of appositional compounds. Kluge calls appositional compounds the additive type Gottmensch as well as the type Eichbaum (§ 93; for our type pathway which I consider to be a subordinative type, see below). Mätzner’s treatment of appositional compounds (I. 523—24) is similar to Kluge’s. Wilmanns (I. 399. 2) follows Mätzner and Kluge. Both Mätzner and Wilmanns interpret combinations based on a relationship of comparison, such as blockhead and goldfish (Mätzner), Goldkäfer, Laubfrosch, Staubregen (Wilmanns) as appositional compounds. Koziol’s classification (§§ 88—92) is the same as Mätzner’s. There is an article by Anna Granville-Hatcher, Modern Appositional Compounds (American Speech 27 (1952) 3—15). Miss Hatcher notes the increasing frequency of appositional combinations, chiefly of inanimate reference which, however, “is largely a phenomenon of journalistic literature”. The paper is remarkable for its wealth of documentation. In the interpretation of the term ‘appositional compound’, however, she is in line with the above grammarians. Like them, she includes among appositional compounds combinations based on the relationship of comparison, as figwort, ironweed, toothpick legs. Her two principal types, pumice stone and fuel oil comprise many relevant examples, but many more are non-relevant. Besides undoubtedly appositional groups such as toy tank, poison gas, gift book and others, we find numerous combinations which are not appositional. Most of the combinations of her type pumice stone are subordinate groups, as teaching profession, marriage relationship, murder charge, cash basis, gold standard.

Only when we analyse a combination as ‘a tank which is a toy’ do we have an appositional type. The analysis of silverfish as ‘a fish which is silver’ is unnatural. In a language such as Turkish, which distinguishes the two types of compounds (subordinative and coordinative compounds) morphologically, silver bracelet (a bracelet which is silver materially) would be appositional (gümüs bilezik) whereas silverfish (a fish which is silver, figuratively speaking) would be subordinative (gümüs bahş-ı, -ı being the mark of subordination). Similar considerations apply to species/genus combinations. It seems pre-
posterous to interpret oak tree as 'a tree which is an oak', or marriage relationship as 'a relationship which is marriage', and Turkish, accordingly, treats such combinations as subordinative compounds. The second-word denotes the wider frame to which the first-word is subordinated. Jespersen's treatment (VI. 8.5), on the whole, distinguishes the types clearly. In a few cases, I disagree with his analyses. The type the Browning family is a subordinative combination, comparable to the teaching profession which we have discussed above. Boa constrictor is a Latin, not an English appositional group.

2. 4. Types all-soul / self-rule

There are also obs with the pronoun all- or self for first word. All- obs are literary and only used in a religious context, denoting attributes of the deity, as all-soul, all-parent, all-power, all-wisdom a.o.

Obs with self- are otherwise restricted. They are chiefly literary or scientific, used only with verbal nexus sbs in which self is the object, as self-rule, self-analysis, self-contempt, self-dislike. Numerous other obs have existence in dictionaries only.

Both all- and self- obs have double stress.

2. 5.1. Types craftsman / bull's-eye

Historically speaking, the types are old genitive groups, though, in many cases, the plural concept has also entered this type. It will be impossible to tell, when exactly s came to be regarded as a derivative element and when combinations of this group acquired compound status. The first type-word is representative of the largest group of cpds, namely those with man for a second-word, the second-type word is characteristic of the second largest group, i.e. obs with the name of an animal for a first-word. I shall first give examples for the type craftsman.

2. 5.2. From the OE period are recorded landsman, steersman, townsman, from the ME period are craftsman, doomsman 'judge', kinsman (kinswoman), from the 15th c. is recorded daysman 'arbitrator'. Since the 16th c. obs have been coined more freely. In the 16th c. we find banksman 'overlooker at a coal mine', obs. cope'sman and cope'smate 'tradesman', deathsman 'executioner', gownsman, handicraftsman, huntsman, salesman, spokesman, tradesman. From the 17th c. are recorded draftsman (various senses), groomsman 'bestman', helmsman 'steersman', herd'sman, kingsman 'royalist', sidesman, sword'sman, tidesman, wood'sman. From the 18th c. date batsman, bondsman, dalesce, gang'sman, groundsmen, lock'sman 'jailor', raft'sman, round'sman, sight'sman, sport'sman, stroke'sman (tradesfolk, tradespeople, tradeswoman), tribesman. From the 19th c. are recorded baile'sman, bandsman, brake'sman, bride'sman (bridesmaid), clansman, crack'sman 'housebreaker', craftsman, drag'sman, frontiersman, guardsman, guild'sman, lead'sman, lock'sman 'lock-keeper', mobsman, oarsman, plainsman, pointsman, thirdsman, topsman 'hangman', yardsman (yardswoman).

2. 5.3. What distinguishes the two -man types, policeman (12.2) and craftsman? Whenever we want to express the idea 'man connected with...' the
usual result is the former type. All ad hoc obs are formed in this way, as 
*ticket man*, *elevator man*, *ambulance man*. The *craftsman* type is much more 
restricted. Its limitations may be described as follows. 1) The basis is a plural 
so we actually have the *policeman* type, as in *backwoodsman*, *woodsmen*, 
*plainsman*, *dalesman*, *roundsman*, *salesman*, *seedsman*, *cragsman*, *cracksman*, 
*pontsman*, *locksmen* 'lock-keeper', *brakesman BE*, *oarsman*, *honorsman* (uni-
versity term). At the same time, however, many words are connected with 
special semantic groups.

2) Many fall under the semantic denominator 'appurtenance to a group or 
solidarity circle', as *landsman*, *townsman* (OE), *kinsman* (ME), *woodsmen* 
(17th c.), *tribesman*, *dalesman*, *gangsmen* (18th c.), *bandsman*, *clansman*, 
*frontiersman*, *guardsman*, *gildsman*, *mobsmen* (19th c.).

3) Another group denotes persons connected with occupations in which 
skill or craftsmanship is involved, as *steersman* (OE), *craftsman* (ME), *hand-
craftsman*, *statesman* (16th c.), *helmsman*, *swordsmen*, *woodsmen* (17th c.), 
*raftsmen*, *batismen* BE, *sportsman* (18th c.), *cracksman* sl, *cragsman*, *oarsmen* 
(19th c.). Almost all terms connected with sports follow the type, as *fieldsman*, 
*linesman*.

4) A few words are outside these principal groups. *Bondsman* 'surety' and 
*bailsman* 'one who gives bail' are law terms. The concept of 'appurtenance', i.e. 
the genitive idea, underlies *groomsman* which attracted *bridesman* and *brides-
maid*. Some words, rather technical terms, denote various kinds of laborers, as 
*sidesman* (Mining term), *leadsman* (Nautical term), *dragsman* 'man who works 
with a drag', *pointsman* (also a Mining term). Now obs. *copesman* 'dealer' (ME) 
attracted *salesman*, *tradesman*, *seedsman* (16th c.). Cases of overlapping are 
A *batman* is a man in charge of a bat-horse, *batsman* is the man who handles 
the bat at cricket.

2.5.4. Examples of the type bull-'s-eye are *cat's cradle*, *cockscomb*, *cat's-
eye* (kind of gem), *cat's paw* 'light air at sea', *beeswax*, *beeswing*, *ratsbane*, 
dog's eye, *duck's bill* (a surgical instrument), *sheep's eye* 'amorous glance', 
crow's foot.

There is a very great number of plant names of the type, as *adder's-grass*, 
adder's-tongue, *bear's foot*, buck's horn, calf's foot, cat's foot, cock's foot, colt's 
tail, cranesbill, goat's beard, hares-ear, hares-foot, hartshorn, hart's-tongue, hen's 
foot, hawk's bill, hog's fennel, hound's tongue, lamb's tongue, stork's bill, wolf's 
bane. The examples given here represent a small group only of the plant names in 
existence. Many of them are OE.

Cpds which have neither *man* as a second-word nor the name of an animal 
as a first-word are rarer. Instances are *doomsday*, *death's head*, the plant names 
devil's bit, devil's-milk (and many other devil's obs), dragon's blood (and other 
dragon's-obs), lady's cushion, lady's finger (and many other lady's obs), monk's 
hood, pope's head.

2.5.5. Surnames in -son are of the same type, the s of the first-word having 
been dropped. Examples are *Nelson*, *Wilson*, *Robinson*, *Robertson*, *Richardson* 
etc.
2.6.1. Types writing-table / dánecning-girl

Cbs of vb plus a common sb existed in OE (stemping-isen ‘stamping-iron’, eardung-hús ‘dwelling-house’, eardung-stów ‘dwelling-place’), but none of the PE cbs is older than ME. The meaning of the cbs is chiefly that of ‘table’ used for (writing). Exs are burning-glass, looking-glass, magnifying-glass, reducing-glass, burying-place, dwelling-place, landing-place, burying-ground, playing-ground, carving-knife, scalping-knife, dressing-case, dressing-gown, frying-pan, kneading-trough, laughing-stock, moulding-board, sealing-wax, sounding-lead, sounding-line, spending-money, spinning-house, spinning-wheel, driving-wheel, stumbling-block, walking-stick, living-room, dining-room.

Based on other notional relations are sweating-sickness, dancing-master, dauring lesson.

2.6.2. Type dánecning-girl. The first-word is the preadjunct (attribute). Instances are walking-leaf, humming-bird, mocking-bird, serving-woman, quaking-grass, standing-stone ‘menhir’.

2.7.1. Types whétstône / râttlesnâke

The morphological type ‘vb stem determining sb’ is not old. There are no formations in Primitive Germanic, and it is doubtful whether the type existed in Primitive West Germanic (see now Carr 175—196). It was certainly weak in OE, much weaker than the type writing-table. For OE exs which are extinct in PE see Carr 189—193. The chief relation is that of purpose, the cb meaning ‘(stone) to perform the action of the vb’. Examples are whetstone OE, grindstone, drawwell, rubstone ‘kind of whetstone’, shake-fork (now dial.). Later are blow-hole (of a whale), blow-pipe, drag-hook, draw-gate, dripstone ‘cornice’ etc., driveway, go-cart, hurl-bat, hush-money, peep-hole, pitch-fork, runway, searchlight, slip-way, spring-board, spy-hole, stopcock, stop-watch, swagger-cane, swagger-stick, swear-word, swim-bladder, wash-house, washcloth, playing, slapstick, technical terms such as drawbar, drawbore, drawknife, drawplate, drawtube, drykiln. The idea of passive action underlies showbread ‘bread to be shown’, drawbridge, treadmill, treadwheel, throwstick.

2.7.2. Type râttlesnâke. The first-word would be the predicate in a sentence, the sense of the cpd being ‘snake which rattles’. There are no OE examples. ME are goggle-eye, leap-year (the year ‘leaps’ insofar as any fixed festival after February skips a day and falls on the next week-day but one to that on which it fell in the preceding year, see OED). Later are cry-baby, cut-grass, cutworm, draw-boy (weaving term), drift-wood, leap-frog, numb-fish (not ‘f. numb adj.’ OED), pass-key, pop-corn AE, pop-gun, roll-top ‘sliding cover of desk’, screech-owl, scratch-owl, shear-grass (because of its sharpness), sob-sister, spring-hare, spring-beetle, sway-beam, sway-brace, swish-cane, touchline in obs. sense ‘ tangent’.
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In some obs we have different notional bases from the ones discussed. The first-word corresponds to a passive vb in a sentence: *mincemeat* 'minced meat'. Other instances are *lock-jaw* 'kind of tetanus', *pickle-herring*, obs. *prick-song* 'music sung from pricked, i.e. dotted notes', *snub-nose*, *skim-milk*. Some have earlier by-forms with second participles as first-words, as *locked jaw, minced meat, pricked song, pickled herring*, but *skimmed milk* 1623 is quoted later than *skim-milk* 1596.

In obs like *touch-paper*, *touchwood*, obs. *touch-powder* etc. where *touch-* implies the idea 'ignition at the mere touch or contact' the first-word may be the deverbal sb, as also in *pay-day*, *payroll*, *workday*, *washday*, *dance floor*, *hitsong*, *whirl-pool*, a.o.

For obs of the t. *scatterbrain* see 'Bahuvrihi compounds'.

Note. I cannot agree with Jespersen's analysis of *drawbridge*, *show-bread*, *throwstick*, *treadmill*, *treadwheel* for which he says that "the sb is the object" (VI. 9. 3). The only type to which this analysis applies is the type 'pickpocket' to which they do not belong. "The sb is the instrument by means of which the action is carried out" in *bakehouse*, *washbasin*, *wash-house*, *washstand* according to Jespersen, which is obviously not correct.

2. 8. 1. Types *bläckbird* / *bläcksmith*, *Nëw Ênland* / *nôrth-cást*

The type is OE. To the oldest layer belong *blackberry*, *freeman*, *holiday* *, quicksilver*, *sweetmeat*, *twelfthday*, *twelfthnight*, *wildfire*, *wildfowl*. The type has been common in all periods of the language. Later exs are *allspice*, *busybody*, *broadcloth*, *blackberry*, *blackboard*, *blue-book*, *blue-bird*, *broad-axe*, *flatboat*, *freemason*, *goodman*, *grandfather* (and other *grand-* obs), *highroad*, *highway*, *highschool*, *hotbed*, *hothouse*, *livestock*, *longboat*, *longhand*, *madman*, *merryman*, *nobleman*, *nobleswoman*, *plainsong*, *quicktime*, *quicksand*, *shortbread*, *shortcake*, *shorthand*, *small-beer* (in U.S. also *near-beer*), *small-arms*, *small-clothes* 'breeches', *smallpox*, *strongbox*, *supple-jack* 'shrub' etc., *sweetbread*, *sweetheart*, *tailboy*, *true-love*, *whiteboy* 'darling boy', *whitefish* and countless other words.

To the same type belong obs of the now dead type *Englishman*, as *Irishman*, *Scotchman*, *Cornishman*, *Kentishman*, *Frenchman*.

We have the type in surnames and place-names: *Newburgh*, *Newcastle*, *Newport*, *Freeport*, *Freetown*, *Goodyear*, *Goodfellow*, *Longfellow* etc. See also 'Bahuvrihi-cpds'.

A second participle for a first-word we have in *freedman*, *friedcake*, *cutwork*, *drawn-work* 'ornamental textile work', *passed-master* 'qualified master' (= past-master).

Cpds with comparatives or superlatives do not exist in the Germanic languages (see Carr 204). The type *freedman* did exist in OE, but only in poetry it seems. Carr has five examples, while the type is much more in use for bahuvrihi adjs. *toren-eage* 'blear-eyed' etc. (Carr 201—203).

2. 8. 2. The type *bläcksmith* is modern. It differs from *blackbird* in that the first-word is not the adjunct, but the subjunct of the second-word. Exs are *greengrocer*, *greenhouse*, *mad-doctor*, *madhouse*, *poorhouse* = *poorhouse*, *poorbox*, *poor-law*, *poor-rate*, *sick-bed*, *sick-room*, *sick-list*, *sick-nurse*, *dry-nurse,*
wet-nurse, whitesmith, tipsy-cake, quit-rent ‘rent paid by a freeholder to be quit of certain services’, condemned cell, wanted list, missing list.

2.8.3. There are many place names of the type New England with a place name for a second-word and new for a first-word, as New Albany, New Bedford, New Haven, New Hampshire, New London, New Windsor, New York and many others. These CBS usually have the main stress on the second element, as parallel German CBS of the type Neubrandenburg do. CBS with a non-place name second-word are stressed on the new, as Newport, Newchurch, Newcastle (see 2.7.1).

2.8.4. End-stressed is also the type north-east, northwest, southeast, southwest. Semantically, these CBS are not in a line with other CBS though they show some affinity to coordinative CBS. The CPD denotes the arithmetical means between the first-word and the second-word concept.

High-lows ‘laced boots reaching over the ankle’ (= between high and low) has the same notional basis, but is fore-stressed.

2.9. Types hé-goàt / shé-dôg

From about 1300 we have sex-denoting CPDS with he and she, originally only as words for animals. The earliest instances of this use are he-lamb 1300, she-ass, she-sheep 1382, she-ape (Ch.). Later are recorded she-dog, she-lion, she-panther, she-pig, she-dragon, she-bear / he-swan, he-goat.

Since the 16th c., the pronouns have also been prefixed to words denoting persons, as in he-lover, he-friend, he-cousin, he-pensioner. Sex-denoting he-cbs are pejorative now. CBS with she are more frequent: she-lover, she-friend, she-cousin, she-pensioner, she-thief, she-witch, she-saint, she-devil, she-baker, she-page, she-favorite, she-Greek, she-preacher etc. The somewhat contemptuous nuance in she-cbs is quite recent and is not necessarily implied. The OED has neutral uses from the 19th c. such as she-cousin, she-relative, she-saint (she-saint in Aldous Huxley, Those Barren Leaves 303 does not seem to have any pejorative note either). But she-poetry is certainly not complimentary.

He-cbs, which have always been rarer, now seem to be American usage only. Exs are he-fellow 1829, he-man 1832, he-male 1909, he-drinker rec., words which stress the ‘male’ quality of a person. Pejoratively sex-denoting are such CBS as he-frump, he-whore.

The type has occasionally been used for names of plants and trees, especially in Australian English. In she-oak, she-beech the first-word implies inferiority of timber. The only he-cb seems to be he-oak, an Australian tree. Dialectal is he-huckleberry ’h. twice the ordinary size’ (ADD).

2.10. Type house-keeping1

CPDS are chiefly based on a ‘predicate/object’ relation, but as such CBS are, on principle, nominalized sentences, other relations also occur. The type occurs in OE with CBS such as gödspellbodung ‘preaching of the gospel’, ðyp swaring ‘oath-swearing’, crism-lysing ‘the taking away of the chrismale’ a.o., but the

1 For the analysis of this type see 2.1.3—4.
II. Compounding

PE obs are not older than ME. Most of them have been coined in the MoE period. ME are backbiting 1175, housewarming 1150 (? 'fuel', next inst. 1577), bloodshedding and bloodletting 1225, cock-crowing 1382, home-coming 1374, man-slaying 1380, child-bearing 1388, leave-taking 1375, sun-rising 13... Later are earthquake obs., bookmaking, oath-taking, cock-fighting, sunsetting, law-giving (15th c.), thanksgiving, thank-offering, house-keeping, peace-offering, seafaring, wool-gathering, book-selling, oathmaking, oathbreaking, bone-setting, sun-burning, heartburning, handwriting (16th c.), man-killing, book-keeping, well-being, cock-throwing, fly-fishing, foxtailing (17th c.), law-breaking, merrymaking, picture-writing, bookbinding (18th c.), land-leaping, pig-sticking, shore-going, sight-seeing, stocktaking, swan-uptping, table-turning, thought-reading, table-rapping, flight-shooting (19th c.), night-flying (20th c.) and many others. The type is practically unlimited.

In most cases the first-word is the object. A subject/predicate relation underlies earthquakeing, cock-crowing, cock-fighting, sunbunning, heartburning, sunrising, sunsetting, tongue-lashing. The first-word would be the subjunct of a sentence in play- (etc.) going, night-flying 'flying by night', cock-throwing 'the sport of throwing sticks at a cock tied to a post', home-coming, flight-shooting 'shooting on the wing', fly-fishing 'fishing with a fly'. The first-word is the predicate complement in well-being and short-coming. Thanksgiving is the only word of the type that is stressed on the second element (perhaps originating in such combinations as rejoicing and thanksgiving, as Robert A. Hall once suggested to me).

2. 11. 1. Types earthquake / strónghold

The second-words are deverbal sbs. OE had obs such as mannslaucht 'man-slaught', niht-wacu 'night-wake', niht-wescce 'night-watch', ellor-sip 'the going elsewhere, death', ad-faru 'going to the stake', sunsein 'mirror' a.o., also the agent-noun type man-slahta 'man-killer' (see 2. 12. 1). OE heretoga (= OHG herizogo) is not an Ec but a loan from German (which borrowed it from Gothic), ultimately representing OGr stratégos. For a discussion of the various theories advanced see Carr 5—6. With the exception of grasshop, night wake, manslaught, and night watch the OE obs appear to have died out by the ME period. The agent-noun type was replaced by formations in -er, impersonal deverbal sbs are formed from the 13th c. on (see 5. 6. 4). The OED gives a somewhat strange explanation of the type (s.v. sunrise and sunshine): 'app. evolved, through syntactical ambiguity, from clauses such as forto (= until), tofore, or before the sun rise, where orig. forto, etc. are conjunctions and rise a verb in the subjunctive', disregarding the fact of the old wf pattern and the rise of impers. deverbal sbs. From about 1250 are recorded heartburn (in form herte-bren) and sunshine (in form sunne-sine). Other coinages from the ME period are earthquake c 1340, obs. earthquake 1382—1541, sunrise 13... sunset 1390, stronghold c 1425, freehold 1467, nosebleed (plant-name) 14... But most PE obs have been coined during the MoE period, as bloodshed, daybreak, eyewink, fleabite, footprint, heartbreak, heartquake, day-peep, troth-plight (16th c.), footfall, foothold, inkshed, inkstand, landslip, nay-say 'refusal', woodcut, deadfall (17th c.), leasehold, horselaugh, moonrise, nightfall, safehold, shoeblack, money-grub,
small-talk, little-go 'an examination at Cambridge' (18th c.), eyewash (orig. 'lotion for the eye'), handshake, landslide, roll-call, side-slip, washstand, bootblack (19th c.), wisecrack AE 1924, legpull 1920.

2. 11. 2. The majority of obs denote a specific instance of what the verbal idea implies, as bloodshed, earthquake, landslide, landslip, sunrise, sunset, nightfall etc.

A concrete sense underlies footprint, fingerprint, inkstand, washstand, fleabite, nosebleed (as a plant-name), woodcut, deadfall 'trap', safehold, stronghold, hairdo, molly-coddle 'a person who is coddled'.

A few obs denote the agent, personal in shoeblack, chimney-sweep 1845, bootblack, pip-squeak 1910 'insignificant person' (obviously 'one who pips and squeaks'), slopokpe (not in OED or Spl.), moneygrub (18th c.). Cp. also by-blow 1595 and obs. by-slip 1670 'illegitimate child'. The notion of impersonal agent underlies obs. nutcrack 1570, doorstop, billfold (both neither in OED nor DAE), hair-tidy (Kath. Mansfield, not in OED or Spl.). An obs. name for an animal is grasshop 'grasshopper' which is OE.

2. 12. 1. Types householder / áll-seér / selé-seéker / shárshoòter

For the description of this type see 2. 1. 3. The underlying theme is a verbal phrase. The second-word is an agent sb while the first-word is the object or, less frequently, the adverbial complement of the underlying verb. It is a comparatively late extension from the older type grass-hop 'grasshopper', the second-word being an OE sb in -a or -e (man-slaqa 'man-killer', gold-gifa 'gold-giver', gær-hoppe 'grasshopper' etc.). From the 9th c. onwards (see Carr 229), extensions in -er begin to occur, as ärgeòtere 'brass-founder', word-såvere 'rhetorician' and others. With the exception of blöd-låtere 'bloodletter' none survived into ME.

2. 12. 2. From the 13th c. is recorded wire-drawer (as a surname in 1265), but it is only in the 14th c. that the type becomes strong. Exs are: man-slayer c 1300, purse-bearer c 1305, good-doer 1340, house-breaker 1340, lime-burner 1329, soothsayer 1340. To the end of the 14th c. belong book-binder, cloth-maker, blood-sucker, house-holder, obs. land-leaper 'vagabond', law-giver, law-maker, shoe-maker, tale-teller, toll-gatherer, tooth-drawer, water-bearer, wrong-doer. From the 15th c. are recorded bed-maker, bone-setter, bricklayer, brickmaker, cup-bearer, ear-picker, gold-beater, grass-hopper, house-keeper, innholder, landholder, law-breaker, money-maker, night-walker, partaker, orig. part-taker, peace-maker, soap-maker, standard-bearer, sword-bearer, tale-bearer, water-drinker, wayfarer. To the 16th c. go back book-keeper, book-seller, bow-bearer, figure-caster, gate-keeper, gold-washer, grave-digger, hen-harrier, horse-breaker, image-breaker, image-maker, life-giver, nut-cracker, pothunter, rat-catcher, ringleader, seafarer, searover, sheep-biter, sheep-shearer, shopkeeper, spider-catcher, stone-cutter, street-walker, swan-upper 'official who ups swans, i.e. marks them for ownership', thief-raker, time-server 'opportunist', torch-bearer. Later are such obs as bog-trotter, bull-baiter, bull-fighter, cabinet-maker, caretaker, daisy-cutter 'horse that in trotting steps low', body-lifter, body-snatcher, devil-dodger, diamond-cutter, dress-maker, fire-eater, fly-catcher, game-keeper, giant-killer, glass-cutter,
goat-sucker, hair-dresser, hair-splitter, hellbender AE 'kind of salamander',
hop-picker, knife-grinder, lamplighter, landowner, matchmaker, money-lender,
oyster-catcher, pawnbroker, penholder, pipelayer, place-holder, place-hunter,
play-goer, pleasure-seeker, prize-fighter (orig. 'one who fights a prize'),
razor-grinder, road-maker, rope-dancer, screwdriver, shareholder, shoplifter, skyscraper
(or. a sail), sleepwalker, stockholder, spirit-rapper, taxpayer, gate-crasher, toad-eater,
watch-maker, wire-puller, woman-hater, wood-cutter, cushion-thumper,
tub-thumper and countless others.

2. 12. 3. The obs chiefly denote persons, but there are also many names of
animals, as daisy-cutter, goat-sucker, gold-beater (species of insects), grass-
hopper, hen-harrier, honey-eater, honey-sucker, leaf-cutter (insect), oyster-
catcher (bird), sheep-biter (dog), spider-catcher (bird), instruments, machines,
devices, as penholder, screwdriver, earpicker, nutcracker, mine-sweeper, mine-
thrower, flame-thrower, timekeeper (orig. a chronometer), silk-winder (a machine),
knuckle-duster.

As already pointed out, the notional relation between the two members is in
the majority of cases that of 'predicate/direct object'. The first-word would
syntactically be a subjunct in grass-hopper, night-walker, sleep-walker, rope-
dancer, street-walker, church-, movie-, picture-, play-, opera-goer, baby-sitter.

There are other obs of seemingly the same make up which must, however,
be kept separate: obs of the t. bag-piper, i.e. extensions of cpds (bagpipe -er).

2. 12. 4. The types all-seer and self-seeker are different from householder in
that the first-word is a pronoun. Only all and self occur. The notional relation
is one of 'predicate/object'. Both types are literary and have been in use
since about 1600. The corresponding OE types al-wealda 'all-wielder = God'
and self-euala 'self-killer' did not survive into ME.

Instances are all-creator, -destroyer, -encompasser, -giver, -maker etc (see
OED); self-advertiser, -deluder, -destroyer, -killer.

With self- there is also another type of cpds which is based on the notional
relation 'subject/predicate', illustrated by the cb self-starter. This use is not
older than the 19th c., and obs all denote technical devices, self- acquiring
the meaning 'automatic'. Obs of this type are not very numerous, as it seems. Exs
are self-actor, -binder, -cocker, -feeder, -holder, -stripper (q. OED self 'prefix' 4).
All these obs have double stress.

2. 12. 5. Type sharpshooter. An agent sb is determined by an adj used as
subjunct. The underlying base is again a verbal phrase as with householder. In OE
we have similar types, now extinct, illustrated by such words as after-genga
and an-genga which did not survive into ME. Obs of the sharpshooter type are MoE
(with the exception of freeholder 1425 which is not analysable in the same way as
sharpshooter, being a translation loan of AF franco tenaut). The type is weak. Exs
are: new-comer 1592, high-binder 'a rough' A sl 1806, high-blower 'a roarer' 1831,
sharpshooter 1802, high-stepper 'horse which lifts its feet high' 1860, shortcomer
1865. Smallholder 1915 is formed after freeholder.

2. 12. 6. There are obs with adjectival first-words in which the notional
relation is that of 'predicate/object', i.e. the adj's are used as primaries (par-
allel to householder).
Instances are good-doer 'benefactor' 1340 (now superseded by a doer of good), evil-doer 1398, well-willer 1448, well-doer 1450 (both are rare now), obs. evil-willer 1460, ill-willer c 1500, well-wisher 1590, ill-wisher 1607, well-deserver 1617, well-meaner 1654, best-wisher 1876 (after well-wisher).

Though dictionaries (OED, Webster) give double stress, a stable pattern does not really exist as the preceding words are not common. The only ones more or less used are well-wisher and evil-doer, and as often as not they are heard with forestress. The equivalent in America for well-doer is the recent dó-goóder which is derived from the phrase do good.

2.13.1 Types Jáck-stráw, tómfoól ('first name—surname' compounds)

These cbs are not all the same type, they represent two het erogeneous groups. The type jack straw, as a real first-name plus surname cb is probably best analysed as containing the determinatum in the first element, jack used as a generalized proper name which has become a common sb. The determinant is given by the second member (which in many cases is a word group). These cbs are somewhat parallel to syntactic group cbs of the type man-of-war and have the same stress pattern: jáck stráw. Jackass is a real cpd with the first-word as a determinant and the second-word as the determinatum. Cbs of this type are accordingly stressed as cpds: jáckAss. The stress patterns sometimes overlap, often with the same word.

These combinations are Christian names to which a quasi-surname is tacked, on the analogy of real names. In Piers Plowman (B 4.17) we find tomme treve-tongue, while similar names of that epoch are Johan Nameless, Johan Trewman (see Skeat's edition of The Vision of William concerning Piers The Plowman, introd. p. XXX). The next semantic step is the use of such quasi-names as generic names. In “The Cook’s Prologue” (23) we have many a Jakke of Dover, and the combination Tom Fool is quoted as early as 1356/7 (OED). It may be interesting to note that the corresponding German type, as in Hanswurst, Hansnarr, also belongs to the 14th c. (see Kl/EW s.v. Hans). English usage does not, however, seem to be older than the 16th century, when not only names of persons, but also plant names and names of animals are formed with first-names.


Names of plants are jack of the hedge, jack by the hedge ‘hedge garlic’ 1536, jack-o’-lantern ‘will o’ the wisp’ 1663, jack-in-the-bush, jack-in-the-pulpit ‘an American herb’, jack-in-a-box ‘a tropical tree’. Cf. OED jack sb’ 38.
2.13.3. With names of animals we have two groups. One is parallel to the preceding combinations, as jackdaw 1543, jack-snipe, jack crow, jack curler, magpie, obs. maggotpie, tom-tit ‘a small bird’ 1709, tom-cod ‘name for several small fishes’. A second group with names of animals are those combinations in which the first element denotes sex. This type is not older than the 17th c. Among the earliest words are terms denoting falcons, as jack-merlin, jack-hobby, jack-kestrel. Other words are jack-hare, jackass. With hob- we have only hob-ferret ‘male ferret’. Jenny-combinations, occurring since 1600, are jenny-ass, jenny-hooper, jenny wren, denoting the female. We have no other first-name to denote female sex, with the exception of nanny in nanny-goat. Tom-combinations denoting male sex of animals are not found before the second half of the 18th c.: tompuss 1762, tom cat 1809, and later tom-dog, -turkey, -parrot, -swan. The OED explains this usage from the name of the hero in a book published in 1760 “The Life and Adventures of a Cat”. The hero bore the name of Tom and is commonly mentioned as ‘Tom the Cat’. But probably the name Tom for cats was already in use, as Tom puss is attested for 1762, whereas the combination tom cat (i.e. without the article) is never used in the book. The combination tom cat was apparently coined on tom puss, which it ousted thanks to the popularity of the before named book.

Other names than the ones treated are rare, as billy in billy-goat 1861 ‘male goat’ and nanny, only used in nanny-goat 1788 ‘she-goat’. Billy- forms a few 19th c. plant names also (see OED).

2.13.4. Hobgoblin and obs. hobthrush were originally used as equivalents of ‘imp, goblin’. The combinations subsequently came to denote animals also.

The tendency with sex-denoting first names is to use the type for smaller animals only, jackass being the only exception.

As semantic extensions of combinations denoting persons we have a few denoting things today, as jack-in-the-box ‘a child’s toy’, jack-o’lantern ‘lantern made of a pumpkin so as to resemble a human face’.

2.13.5. Jack- and tom-combinations go back to the 14th c., maggotpie is recorded for 1573, magpie for 1605, hob- (a variant of Rob, Robin) combinations crop up in the 16th c., jenny-combinations occur from about 1600 on, billy- and nanny-combinations are still more recent (see the foregoing exs).


2.13.6. Infrequent is Jim, as in jim-crow 1875 AE (orig. ‘name for a negro’, also ‘an implement for bending iron rails’), jimp-dandy 1888 AE ‘superfine person’.

For Peggy- obs the OED has no quotations before the 19th c.: peggy-with-(her)-lantern = jack-a-lantern, also with regional English bird-names as peggy-whitethroat, peggy-dishwasher.
Cbs with Jerry, recorded since the 18th c., are Jerry sneak ‘a sneaking fellow or henpecked husband’ 1764, Jerry-come-tumble, Jerry-go-nimble ‘tumbler, performer’, Jerry-builder ‘a speculating builder’.

With Dick and Dicky the OED has a few cbs which are not, however, StE.

2.13.7. There is no fixed stress pattern for first name-surname cbs. Many, as the Jerry-cbs, have the pattern usual with real first name-surname cbs. With other cbs we observe a tendency toward unity stress, but the place of the stress varies. The indications of the various authorities also differ. Webster gives tomcat, tomcod, tomit with forestress, OED and Jones give the same words (the word tomcod is not listed in Jones) with double stress. I have heard both pronunciations. The prepositional Jack-cbs have forestress with double-stressed variants for some of them in Jones, whereas Webster and OED give double stress for most cbs. Jack-tar has double stress in Jones and Webster, endstress in OED. The tendency to give forestress is observable with names of plants, things and animals as far as they do not denote sex. With sex-denoting cbs the tendency is in favor of double stress (but forestress in billy-goat, nanny-goat, jackass). Double stress also characterizes cbs denoting persons, as already pointed out, while others have endstress (jack-a-dandy, jack-of-all-trades, the latter with stress on all) or forestress (jack-in-the-box, jack-in-office).

Grammatically, the unity character is stressed by the group -s: jack-a-dandies, jack-in-the-boxes, jack-in-the-pulpits, jack-o’-lanterns etc.

2.14.1. Types Fitzhèrbert / Mac Árthur / Kirkpátrick (inversion-compounds)

As we have pointed out, English compounds are coined on a determinant/determinatum basis. Cases of determinatum preceding the determinant occur as syntactic groups which may result in lexicalized combinations. As they are not morphologically isolated from syntactic combinations, they cannot claim the status of compounds. We have treated them as lexical phrases.

Other combinations are coined after the pattern of a foreign language. In legal and semi-legal terminology, we have many substantives followed by an adjective. Such combinations, illustrated by consul general, follow the French word-order introduced into English through Law-French. As there is no competing syntactic group, we consider the type as morphologically isolated. In combinations that are felt to be syntagmas, i.e. combinations of full signs, the determinatum is the inflected part (but see JeMEG 2.2.41). Examples of the type are brother german, sister german, fee simple, ambassador extraordinary, governor general, postmaster general, heir apparent, heir presumptive, court martial, letters dimissory, letters testimonial.

A few early combinations lie outside the legal sphere, as knight errant (= F chevalier errant) 13. ; falcon gentle (= F faucon gentil) c 1400; crown imperial (plant name) 1611. The combination sum total 1395 may be a direct translation of ML summa totalis. Translation loans from Neo-Latin are gum Arabic, gum elastic (= gummi Arabicum, gummi elasticum). A translation loan of a different type is court-baron 1542, an Anglo-French cb for earlier court de baron.

3
II. Compounding

All these obs have double stress, though some of them show the group -s in the plural (see esp. Je II. 2. 41, but also the respective entries in OED and Webster; usage varies a great deal with each cb, according to the respective authorities).

There are a great many plant names with herb for a first member which are either translation loans from French, as obs. herb Ite 1386 (= OF herb ive) or from Medieval Latin, as herb Robert 1265 (= herba Roberti) and obs. herb John 1440 (= herba Johannis). Others are 16th c. and later coinages after the pattern. Exs are herb Paris, herb Gerard, herb-Henry, herb-grace, herb-carpenter etc. There are also combinations with adjective determinants: herb royal (= F herbe royale) 1530 is alive, but others (as herb impious, herb terrible) are obsolete today (see OED s.v. herb). After the same pattern is coined apple-John 1597 (but also called John-apple) which is a forestressed cpd. DA records peckerwood 1835 as a western AE variant of common standard wood-pecker.

2. 14. 2. Other types of inversion-compounds have a restricted range of derivative force. It is only with surnames that we find compounds of the types Fitzherbert and MacArthur and only with certain place names that the type Kirkpatrick occurs. Moreover, the morphemic character of Fitz-, Mac-, and Kirk- is dubious, synchronically speaking, as Fitz- is recognizable for the philologist only, while combinations with Mac- and Kirk- are identified by Irish and Scottish speakers only. We include the types here on the merit of their historical interest.

Type Fitz her bert. Fitz is the Anglo-Norman spelling of OF fils 'son', and the Normans formed patronymic names composed of fitz and the oblique case of the father's name (in a few cases where the mother is important, her name forms the second element, as ihus fitz mari, Henry le Fytz Empryce). This practice was in later times extended to the surnames of illegitimate children of royal princes. Surnames coined on the pattern are numerous. A few exs are Fitzgerald, Fitz-Hamo, Fitzharris, Fitzherbert, Fitz-Neal, Fitz-Osbern, Fitz-Peter, Fitz-Stephen, Fitz-Thomas, Fitz-Urse, Fitz-Waiter, Fitz-Warennne, Fitz-William/Fitzroy.

With the exception of forestressed Fitzroy the stress is on the second element. The first member has weak stress.

The corresponding Gaelic type of patronymic names is MacArthur, occurring in Irish and Scottish surnames. Spelling and stress vary. Many names are spelt as one word, in others the second elements begins with a capital letter through no word division is made between the two elements. Stress is more often on the second element, especially in Irish names. Stress on the first element often betrays the psychological effort of a person to efface his non-English descent. A few of the countless names are MacAdam, Macdonald, MacGregor, MacIntyre. In end stressed names the first-word has weak stress.

Celtic influence we have also with many place names of the type Kirkpatrick 'Patrick's church' in Northern England, Scotland, Wales and Ireland (see Ekwall, Scandinavians and Celts in the Northwest of England, Lund 1918).
COMPOUND EXOCENTRIC SUBSTANTIves

2.15.1. Type pickpocket

Forms exocentric cpds denoting the agent who or which performs what is indicated by the predicate/object nexus of the formal basis. The agent may be a person, an animal, a plant, a thing, or something immaterial. Personal sbs are recorded as early as the beginning of the 14th c. while words of other sense groups do not seem to occur before the 15th c. The type arose under the influence of French imperative words, and as Old French words almost all denote living beings, this type was imitated in English. The use of the type for other meanings is perhaps an independent English development.

Early exs of personal agent sbs are obs. trialbastoun 1305, spurnwater 1347, spilltime 1362, cutpurse 1362, letgame 1374, obs. pickpurse 1386, lickpot 1387, chopchurch 1391, pickthank ‘toady’ 1412, pinchpenny 1412, lickdish 1440, wantwit 1448. There has been an uninterrupted flow of coinings ever since.

Personal sbs have at all times had a pejorative tinge, so the type has never been a rival of suffixal agent sbs. A very few obs only are neutral terms designating the holder of an office, but even then the occupation is always an inferior one: turnspit, turnbroach ‘boy whose office was to turn the spit’ 1606, turnkey ‘a subordinate jailer’ 1654, scarecrow, orig. ‘person employed in scaring birds’ 1553, turncock ‘a waterworks official’ 1711, prickbill (term used at Christ Church, Oxford, for a junior student checking the attendant list at Chapel) 1825. All other personal sbs are contemptuous or ridiculing terms (in slang there are many more of them), designating disreputable persons, as criminals (cut-throat 1535, picklock 1553), drinkers, gluttons, parasites (fill-belly 1553, fill-pot 1616, tosspot 1658, lickdish 1440, lickladle, lickplatter 1571, lickbox 1611, lickspit, lickspittle 1629), slanderers (pickthank 1412, telltale 1548, findfault 1577), idlers (do nothing 1579, donought 1594), mischievmakers (killjoy 1776, spoilsport 1821), sluggards, stupid or ignorant persons (lackbrain 1596, lackwit 1667, lacksense 1881, lackmind 1887, knowlittle 1651, knownothing 1739), scoundrels, ruffians (rakehell 1550, rakeshame 1599, lack-grace ‘reprobate’ 1817), unreliable persons (turncoat 1557, turnskin 1831), prodigals and misers (pinch-back 1600, spendthrift 1601, pinch-belly 1648, pinch-gut 1659, turn-penny 1824), the least objectionable quality being perhaps that denoting one who is a dare-devil 1794.

The type forms many nicknames, as scaldrag ‘dyer’ 1630, scrapegut ‘fiddler’ 1837, sawbones 1837.

2.15.2. No pejorative tinge is inherent in other than personal sbs. Here belong names of animals, as wagtail, bangtail, swishtail, shufflewing, turnstone, shearwater (birds), burst-cow, tumble-dung (insects), stay-ship (a fish). "The number of popular plant-names ... is considerable" (Uhrström): catchfly, cover-shame 'plant used to procure abortion', heal-all, kill-lamb, tear-thumb, cut-finger a.o.

Impersonal material agents (tools, devices etc.) are denoted by turnpike 'barrier' 1420, breakfast 1463, now arch. cover-slut 'apron' 1639, turnstile 1643, cutwater 1644, stopgap 1684, turn-buckle 'catch, fastening' 1703, wraprascal 'loose garment' 1716, breakwater 1721, stay-stomach 'snack' 1800, dreadnought, orig. 'thick coat or cloth' 1806, turntable 1835, tangle-foot 'whisky' 1860, while inmaterial agency underlies make-rime 'phrase used for the rime', make-talk 'something said for the sake of talking', make-way 'event which leads up to another', a.o.

Some obs are only used as adjs: break-back 1556, break-neck 1562.

2.15.3. History of the type pickpocket.

No coinings are recorded from OE. The earliest ME words date from about 1300 (only pickpocket words) which have a colloquial character. The late occurrence of the type seems to point out that the t. pickpocket arose under the influence of French where coinings of the type coupe-gorge 'cut-throat' were numerous (coupe-gorge 'cut-throat' from the 13th c.; coupe-bourse 'outpurse' is recorded from the 12th c., proper names of the type are much older). Darmesteter has convincingly shown that these combinations are imperative phrases by origin. A person or a thing with which one has an intimate connection (an animal, a tool, a place) is adressed in an encouraging, challenging or mocking way, and this address then serves as a name. Well-known is the name of the hero of Hastings, Taillefer, and the cook Chantecler. Darmesteter's brilliantly written treatise is of interest for the comprehension of imperative words in general.

Imperative words are rather recent in the history of IE languages. None are found in Old Greek or Latin, which is not surprising as such combinations are not likely to have originated in literary language at all. It is, however, possible that they did exist in the speech of the lower classes, as Jacobi (Compositum und Nebensatz, p. 73, q. Wilmanns 304. 8 note) rightly supposes. They begin to abound in the Romanic languages, which had no literary tradition. It cannot be proved to what extent English pickpocket words have ever been felt as imperatives. They may never have been more than substantivized phrases 'verb/object' with an agent-noun sense, though substantivized imperative sentences clearly show the early existence of imperative feeling (see the names from Piers Plowman). Plant-names of the type forget-me-not need not be patterned on F 'ne m'oubliez myo' (OED), as German, Danish and Swedish show the same type. A post hoc does not prove a propter hoc. AE speak-easy is an almost visual imperative, suggestive of the 'hush, hush' with which one is shown into a bar. It is possible and even probable that imperative words existed in English before 1300, but we have no OE colloquial texts. The sudden rise of numerous coinings may be due to the latent energy released through the
French pattern. I have myself witnessed a similar thing in Turkish. In Turkish, there are very few common nouns on an imperative pattern. But when in 1934 everybody had to find a family name for himself, thousands of them were coined as imperatives, all of a sudden, and apparently out of nothing. Whatever the psychological substratum of the 'pickpocket' type may be, it has proved exceedingly productive in English and caused the rise of another agent-noun type, runabout.

2. 16. 1. Type runabout

forms exocentric agent sbs from verbal phrases whose second constituent is an adverbial complement, most often a particle. The type is essentially a variant of t. pickpocket though it is usually classed with blackout (cp. 2. 17; Biese, Jespersen, Lindelöf). The meaning is 'one who (sometimes that which) runs about'.

Like pickpocket words, personal sbs of the type runabout are not neutral in meaning and therefore not rivals of suffixal agent sbs. Most of them have a derogatory connotation, many are slang words, and a few words which are not pejorative (standby 'helper', stand-off 'the halfback in Rugby football' are the only words I can think of) do not disprove the general character of the type.

With the exception of impersonal lean-to 'shed' 1461, and start-up 'kind of boot' 1517, cbs are recorded from about 1550 on: runaway 1547, runabout 1549 (once before in P. Pl. B. 6. 150 as a proper name: Robert renne-about), holdfast 'clasp' 1576, holdback 'hindrance' 1581, pullback 'adversary' 1591, sneakup 1596, go-between 1598, siirabout 1682. In the 16th and 17th c. a good number of words were coined which are now obsolete (hangby 'parasite', holdfast 'miser', startback 'deserter', go-before 'usher', lieby 'mistress' fallaway 'apostate' etc.). Only a few cbs are recorded from the 18th c., as lie-abed 'late riser' 1764, the now dial. rouse-about 'restless p.' 1746, ne'er-do-well 1737, come-by-chance 'bastard' etc. 1760.

The 19th c. was very productive. We find dragout 'girl partner for an occasion' sl, later gadabout, setup 'poor fighter', die-hard, turnback 'coward', stowaway, goback, hangback 'hesitater', stay-away, roust-about 'handy man' etc., knock-about 'actor of violent and noisy pantomime', stay-ashore, standby, stay-at-home a.o. From the 20th c. are recorded such words as sneak-away 'coward', butt-in 'intruder', cutup 'expert' sl a.o. There are many slang terms which cannot be dated at all.

2. 16. 2. Words denoting impersonal agents are less numerous. Exs are holdback 'hindrance', holdfast 'clasp', knockdown 'liquor', takeup, pickup (two words for machinery devices), setback 'check to progress', rockaway 'a vehicle'

AE, tilt-up 'the American sandpiper'.

Though considerably weaker than the very prolific impersonal type blackout, the type runabout is pretty productive.

2.16. 3. Lindelöf, Biese, and Jespersen treat types *runabout* and *blackout* as one. Historically, this does not seem to me to be justified. It is obvious that personal sbs, i.e. agent nouns, did not originate in impersonal sbs of the type *blackout*. The type *runabout* probably arose from the type *pickpocket* and was, at the beginning, not connected with the impersonal type *blackout* because this latter did not exist. "Of the combinations in our material which appear in a personal sense (a little more than seventy in number), more than half (c. 40) show only a personal sense or appear in such a sense earlier than with any other signification" (Lindelöf 35). It may be objected that there are also personal derivatives from simple verbs, as *sneak*, *cheat*, *coach* etc. But if we check their history, we see that this type is not older than the 16th c., with the exception of *help* 'helper' which is OE in this meaning. Hertrampf has very few personal sbs, and Biese confirms the rarerness of 'converted' sbs: "the conversion-substantives used in a personal or concrete sense are, especially in the earlier stages, of comparatively slight importance" (Biese 308). Lindelöf himself feels compelled to suggest that "the origin of this type (= t. *runabout*) is perhaps to be found in imperative phrases" (35). Such an assumption is certainly supported by the early existence of so many obs whose imperative character cannot be denied. Since the Late Middle English period imperative words have been frequently used to coin proper names (surnames). A few instances are *Lovegold*, *Makejoy*, *Mendmarket*, *Drinkwater*, *Breakspeare*, *Shakespeare*, *Shakestaff*, *Hackblock*, *Hurlbat*, *Shakelance*, *Scaredevil*, *Lackland*, *Trustgod*, *Doolittle* / *Cutright*, *Golightly*, *Playfair*, *Treadaway*, *Walkup*, *Drink-low*.

As for surnames, Piers Plowman offers rich examples, as *Do-wel*, *Do-bet*, *Stelenoght*, *Stel-noght*, *Here-wel*, etc., also longer imperative sentences, as *Bereno-fals-witnesse*, *Trewe-tonge-tell-me-no-tales*, *Suffre-til-I-se-my-tyme*, *Suffre bi souereynes to haven here wille*. Langenfelt (pp. 76/77 and 84/85) has some more coinings from LME, he also quotes Puritan names such as *Kill-sin*, *Fly Debate*, *Praise-God*, *Fight-the-Good-Fight-of-Faith*, *Weep-not*, *Be Faithful*.

2.16. 4. Cp. also the many other common sbs made up of a verb and an adverbial complement, as *hop-o'-my-thumb* 1530, the plant-names *forget-me-not* c 1532, *touch-me-not* 1597, *livelong* 1575, *pissabed* obs. 1565, *kiss-me-quick* 1882, more recent (= 19th c.) *pick-me-up* 'stimulating drink', *hand-me-down* = *reach-me-down* 'ready made or second-hand garment', *speak-easy* where the circumstancies from which the expression derives is clearly recognizable, in most cases by the first person pronoun as reference to the speaker, and whose conceptual analysis has therefore not conformed to that of *runabout* obs.

It is interesting to note that the earliest instance recorded of vb/adverb groups is *lean-to* 'shed', obviously originating in an imperative. It is also worthy of note that, with the exception of the rare word *sit-up* 'surprise' 1483 (which, by the way, cannot be considered as derived from any vb, as *sit up* vb with meaning 'be surprised' is first recorded 1889), action sbs of the type *blackout* do not seem to occur before 1550 and are infrequent before 1650 which seems to clinch matters in favor of *runabout* being an offshoot of *pickpocket*.

Other obs have the same analysis as *runabout* compounds but have a prepositional group or an adverb as second constituents: *slug-abad*, *stick-in-the-mud,*
sit-by-the-fire, stay-at-home, lie-abed, ne'er-do-well. This morphological make-up is characteristic of names for persons or personified things; it never occurs with impersonal sbs of t. blackout.

Other imperative words are happy-go-lucky, orig. adverb with meaning ‘as luck will have it’ 1672 (sb 1851, adj 1856), ne'er-do-well 1737, never fail ‘person who never fails one’ 1850.

2. 17. 1. Type blackout

While semantically following type pickpocket, the type runabout is morphologically the same as the type blackout. The latter forms impersonal deverbal sbs in senses usually expressed by such derivatives. Most frequently, however, cbs of type blackout denote an act or specific instance of what is expressed in the verbal phrase.

Compounds are not numerous before 1650. The earliest are sit-up ‘surprise’ 1483, rare, put-off ‘shift, excuse’ 1549, holdfast ‘action of . . .’ 1578, pull-down ‘action of . . .’ 1588, hop-about ‘dance’ 1593, start-back ‘action of . . .’ 1626, pass-by ‘Passover’ 1550—1690, rare, turn-about ‘vertigo (disease)’ 1598—1611, come-off 1634, go-down ‘retreat’, turn-over 1660, Passover 1662, set back 1664, wind-up 1665, pull-back 1688, turn-out 1688, draw-back ‘act of drawing back a sum paid as a duty’ 1697, put-back ‘reverse’ 1697. No other cbs appear to be recorded before 1700. The 18th c. adds about 30 cbs (acc. to Lindelöf), but of the cbs now in use only 17% make their appearance before 1800 while more than two thirds have been coined after 1850 (Lindelöf). Lindelöf points out the great influence of American English in the development. Of the cbs recorded between 1850 and 1900, 33% are American English, of those attested after 1900, the percentage is 37%. Lindelöf has collected about 450 exs, but there are many more now, as the type is growing daily. Quite recent are bombout, playback, fallout, flashback.

2. 17. 2. This is a short collection of compounds illustrative of the type.
tion’, lay-off, layout, layover, shutdown, lookout, look-in, rake off ‘profit’, stand-
in, walk-out, frame-up ‘conspiracy’, showdown, cut-out ‘automobile attach-
ment’, hand-out ‘food or clothing given to a beggar’, slip-over, pullover ‘sweater’, make-up, washout, takedown, take-in, take-off, take-up, pickup, change-over, spread-over ‘a working hour arrangement’, pop over ‘kind of quick bread’ AE.

The following words (chiefly from the Dictionary of Americanisms) appear first recorded in American English: dust-up ‘uproar’ etc. 1897, fade-away ‘act of disappearing’ etc. 1911, fetch-up ‘the sudden stop at the end of a fall’ 1866, flashback 1918, frame-up 1907, freeze-out ‘a variety of poker’ 1856, go-back ‘one who returns to the East after making a poor go of it in the West’ 1859, hangover 1894, hook-up 1903, kickback 1940, line-up 1896, run-around ‘a felon’ 1872, sell-out 1883, slop-over ‘instance of going to excess’ sl 1908, stand-off 1843, shape-up 1942 (ASp 29 [1954] 285). A word coined in connection with atomic energy experiments is fall-out 1952 (ASp 29 [1954] 73).
II. Compounding

2.17.3. Many combinations have several meanings, as is often the case with deverbal impersonal nouns: \textit{takedown} may be the act or an instance of taking down, esp. a humiliating, it may also be the part of a rifle; \textit{take-off} is the act of taking off or the place connected with it; \textit{a turnabout} is the act or an instance of turning about, while in AE it has also the concrete meaning 'merry-go-round'; \textit{a setback} is an unexpected check, in AE it also has the concrete meaning 'eddy'.

The types often overlap so that a combination belongs to the type \textit{runabout} as well as to the type \textit{blackout}. \textit{Turn-about} in the sense 'a radical' as well as in the sense 'merry-go-round' are the type \textit{runabout}; so is \textit{pickup} for a gramophone device, \textit{turnback} for one who lacks courage, \textit{cut-off} for a stopping device, to give only a few instances, which in other meanings belong to the type \textit{blackout}.

As with \textit{runabout}, the second-word of a cb is usually a locative particle or secondary locative particle, as \textit{back}, \textit{down}. Other second-words we have in \textquoteleft say-so 'dictum', \textquoteleft think-so 'a mere opinion', \textquoteleft standstill.

2.17.4. About 20\% of the \textit{runabout} and \textit{blackout} cbs studied by Lindelöf are (also) used as preadjuncts (= attributes). For this primarily syntactic phenomenon see also Jespersen MEG II. 4. 70—76.

Despite many traditional stress indications of OED (giving endstress to e.g. \textit{set-to, come-down, cut-off}), the pattern heavy stress/middle stress is now morphophonemic with both \textit{rûnabout} and \textit{blàckout} cbs (see also Kennedy 47).

2.18.1. Types \textit{hûnchbàck} / \textit{pàlefàce} / \textit{five-finger} / \textit{scâtterbrain} (bahuvrîhi compounds\textsuperscript{1})

2.18.1. Bahuvrîhi compounds are exocentric formations denoting one who or that which is characterized by what is expressed in the compound. We often name a person, animal, or thing for some striking feature in his or its appearance, also for other characteristics serving as labels by which the person (animal, thing) is subsequently identified (for details concerning the process see Darmesteter and Petersen). In principle, any simple word is susceptible of being used in this way (cp. E \textit{boots} for one hailed by the word 'boots', G \textit{Zwerg Nase}, but compounds are naturally more numerous. Everybody has a face, but not everybody has a pale face.

2.18.2. The bahuvrîhi types are obviously the same as the ones we have found with common endocentric compounds. It must not, however, be thought that bahuvrîhi cpds are what was formerly called 'mutated determinative cpds' (for earlier views held on the subject see Petersen 273, fn. 1). Both types of cpds existed side by side. In the Germanic languages, moreover, the type \textit{paleface} was in use when the corresponding determinative type \textit{blackbird} was

still in its infancy (see Carr 162—163). Lastly, the type _five-finger_ has no parallel in the determinative cpds in the early periods of Germanic (Carr 164). Bahuvrihi cpds of the type _scatterbrain_ do not exist in West Germanic. In German they make their appearance in the 14th and 15th centuries; in English they do not appear to have been formed before the Modern English period.

2.18.3. The origin and history of bahuvrihi cpds has been much discussed (for details see Petersen 254—257. He does not mention Darmesteter who had expressed ideas similar to his, see Darmesteter 50—65. Cp. also Henzen 90). As Petersen has convincingly shown, the origin of exocentric cpds is to be sought in the practice of namegiving. Bahuvrihi cpds occur very early in the IE languages (OGr _chrysokomē_ ‘golden-hair’ (a plant), _chrysókarpos_ ‘ivy’, _tripous_ ‘tripod’ a.o.), but most of them were only used as adjs. In OE and the early Germanic languages in general, we find no common sbs of bahuvrihi formation, while personal names, such as OE _Widsith_, OHG _Hartmut_ do occur. Brugmann (Gr. 2, 2°. 654) and Petersen (274—277) point out that the adjectival function must have arisen out of the appositional use of bahuvrihi sbs in conjunction with personal names (_rhododáktylos_ ἕος = Rosefinger _Eos_) which is probably how the adjective character in fact originated. But it still remains to be shown why the Germanic languages use bahuvrihi cpds as adjs only.

2.18.4. Whatever the reason may be, all OE bahuvrihi formations are adjs, with the exception of the type _five-finger_ which formed plant-names (though only as translation loans of Latin words: _fīlēaf_ ‘quinquefolium’, _hundsēđafod_ ‘cynocephalus’ (q. Carr 166). There is also the sb _ānhorn_, formed on the Latin adj _unicornis_.

The type _hunchback_ was comparatively weak in OE (with exs such as _wulf-heort_ ‘wolf-hearted’, _stīlecgy_ ‘steel-edged’). The type _paleface_ was pretty well developed (with instances such as _heardecg_ ‘hard-edged’, _jamigheals_ ‘foamy-necked’, _heardheort_ ‘hard-hearted’, _bærfot_ ‘barefooted’). Both types had practically ceased to be living types by the ME period though _barehead_ 1320 and _bareback_ 1562 were formed on the analogy of _barefoot_. They are, however, adverbs as far as present-day speech-feeling is concerned.

2.18.5. Bahuvrihi cpds as sbs have slowly developed since the ME period, but are rare before the 16th c. Early coinages are words such as _white-thorn_ 1265, translating L _alba spina_, the nickname _court-mantle_ 1367, the fish-name _stickle-back_ 14…, the bird-name _redbreast_ 1401, the nicknames _hospur_ 1460 and _hare-foot_ 1410. They are much in favor today, as recent words such as _high-hat_ 1899, _rubber-neck_ 1896, _highbrow_ 1911 (all originally Americanisms) show. The rise of substantival bahuvrihi cpds in ME is connected with the “adjectivisation” of the types, chiefly by means of -_ed_ (see Carr 252—267). This extension goes back to OE, so when, say, _red-breasted_ had become the normal adj, the way was free for _redbreast_ as a sb. Similar adaptations to genuine adjectival types were effected in other Indo-European languages (see Brugmann, Grundriß 2, 87ff. and Wilmanns 2, 313, Carr 252—267).

In modern scientific and technical terminology we have many substantival and adjectival bahuvrihi-cpds (see _uni-, multi- _and other number-denoting prefixes).
II. Compounding

2.18.6. Substantive bahuvrihis all date from modern times in Germanic languages. Considering that in OE they are practically non-existent and that in German only about 5 instances appear to occur between the 8th and the 13th century, it is impossible to subscribe to Carr’s opinion that “there is then a direct line leading from the original type of Substantive Bahuvrihis in the parent Indo-Germanic language through Primitive Germanic, where the traces are almost obliterated, down to the modern representatives of this type” (170). And to say that bahuvrihi sbs “belong primarily to the vulgar or non-literary stratum” of the language (169) is certainly no argument to explain why they are not recorded. They have that particular tinge today, if only when applied to human beings, so names of things might always have been possible. Bahuvrihi sbs were not derogatory in the older IE languages.

The late rise of substantive bahuvrihis in English (and German) seems to me to be connected with the rise of the other group of exocentric compounds, i.e. *pickpocket* cbs in whose wake I think bahuvrihis were created. As Petersen has pointed out, there is no difference in principle in the coining of the various exocentric cpds, all denoting one who or that which is characterized by a phrase applied to him or it. This also seems to explain the usually derogatory shade of meaning modern bahuvrihi sbs have, as far as personal sbs are concerned. It is a trait that all exocentric cpds have in common. So I do not think there is anything intrinsic in the derogatory character of bahuvrihis. As the original pattern, the *pickpocket* words, inherited this shade from their French patterns, they carried it on and gave rise to the same connotation in other exocentric cpds formed later.

2.18.7. The strongest type is *paleface*, the weakest are *hunchback* and *scatterbrain* which have formed a few words only. The cpds chiefly denote living beings (persons or animals), but there are also plant names and a few words denoting various things. Words denoting persons have in most cases a depreciative or mocking tinge. The following is a short list of exs (*paleface* and *hunchback*): *bigwig, blackmouth* ‘slanderer’, *boldface* ‘impudent p.’, *fathead* ‘stupid dolt’, *flatfoot* ‘policeman’ (A sl), *flathead, flatnose, greenhorn*, *green-sleeves* ‘inconstant lady-love’, *greybeard, grey-coat, hardhead, hightbrow, highhat* AE, *hotbrain, hothead, hotspur, lighthead, lazybones, lightskirts* ‘woman of light character’, *longhead, madbrain, numbskull, paleface, redcap, redcoat, redhead, roundhead* (various meanings), *soberides, softhead, sorehead* AE, *squaredoes, thickhead, thickskin, tighthead, whitebeard, whitecoat* (a soldier), *woollyhead* ‘negro’, also ‘abolitionist’ are words denoting persons, as well as *bonehead = blockhead = hunkhead = bullhead, doughface* AE, *humpback, hunchback, lionheart, madcap* (mad is used as primary), *pot-belly, rubberneck* AE, *egghead ‘intellectual’* AE.

Words denoting animals are *black-face* ‘blackfaced sheep’, *blackhead* (a bird), *bluecap* (various animals), *greenshank* ‘the sandpiper’, *greyback* ‘louse’ AE, *open-bill* (a bird), *rawhead and bloodybones* (mursery animals), *redleg(s)*, *white-throat* (birds), *redbreast* ‘the robin’, *shorthorn* (kind of cattle), *wryneck* (orig. a bird), *thick-knee* (a bird) / *stickle-back* (a fish, fr. *stickle* ‘prick, sting’).

Plant-names are *blue-bell, whitethorn, longleaf* ‘the Georgia pine’, *red-berry* (an Amer. plant), *red-knees* ‘the water pepper’, *red-root* ‘New Jersey tea’ a.o.
Bahuvrihi-cpds are often used for nicknames and surnames: *Longshanks* was the nickname of Edward I., *court-mantle* a surname of Henry II. (= short cloak). Well-known names are *Leather-stocking*, *Bluebeard*.

Non-concrete are *blackleg* ‘name of a disease’, *flat-foot* ‘name of the bodily defect’, *faintheart* in the now obs. sense ‘faintheartedness’.

2.18.8. The type *scatterbrain* is weak; I have only modern exs: *crack-brain* ‘crack-brained p.’ 1570, *draggle-tail* ‘a draggle-tailed p.’ 1596, *shatterbrain* 1719 = *scatterbrain* 1790, *spring-tail* ‘species of insects that spring by means of their tails’ 1797, while *muddlehead* 1853 is backderived from *muddleheaded* 1759.

2.18.9. The type *five-finger* forms a special group insofar as cpds of this type do not exist outside the domain characteristic of bahuvrihi cpds. The second-word is in the singular, the same use we have in syntactic phrases: *a five-act tragedy*, *a two-horse carriage* etc. Of the various bahuvrihi types, *five-finger* is the only one that formed sbs in OE (the type *scatter-brain* is MoE, anyhow), such as *ánhaga* ‘hermit’ (lit. ‘who has one enclosure’), *ánhorn* ‘unicorn’. From the OE period are the plant-names *five-finger* and *five-leaf*. Modern plant-names are *one-berry* 1548 and *nine-bark* 1859 (Amer. shrub). *Nine-holes* 1573 and *nine-pins* 1580, both names of games, betray their modern coinage by the plural form of the second-word. The type has hardly much formative power any longer, unless we reckon here words such as *one-step*, *two-step* which I think are really clipped cpds (the word dance being dropped) just as *four-oar* for *four-oar boat*, *three-star* for *three-star brandy* and others. Otherwise the idea ‘he or that characterized by . . .’ is expressed by the type *fourwheeler* (see sf-er).

2.19. Type dúgoêt

This type has formed a very few words only. The type word is originally American English and first recorded from 1819. Other instances are *left-over* 1897, *sawed-off* ‘short person’ (q. Kennedy 47, not in OED or Spl.). Others, as *cast-away*, *cutaway*, *come-by-chance* may belong here, but have been treated as obs of the type *runaway*. 
II. Compounding

REDUPLICATIVE COMPounds

2. 20. Types tick-tick, choo-choo etc.

There are compounds formed by the reduplication of a sign. Such a repetition naturally serves to underline the semantic content of the sign in one way or another. In English, the use of repetition is almost completely restricted to expressive sound words.

As a description of the sound (e.g. *his heart went thump thump*) repeated words are individual acts of speech with no morphologic status of their own. They are on a level with *yes, yes; no, no; hush, hush* which are intensifications of the single word with an independent stress on each element. Used as substantives or verbs, however, reduplicated compounds of expressive words have forestress. They all mean 'instance, act of . . .', implying monotonous repetition or continuation of the sound. Though, theoretically, any expressive sound word is reduplicable, the practice is more literary than colloquial, in American English even more so than in British English. Examples are *clamp-clamp, clop-clop* (both of hoofs), *click-click* (of a needle, a loom), *clink-clink* (of trucks), *clump-clump* (of boots), *chunk-chunk* (of oars), *chuff-chuff* (engine, train), *thump-thump* (of crutches), *pad-pad* (of shoes), *tick-tick* (of a clock), *tap-tap* 'a series of taps'. These reduplications also occur as verbs, if less frequently.

In some cases, the expressive basis does not exist outside its use in a reduplicated compound, as in *bumbum* 'monotonous music', *blahblah* 'twaddle, nonsense'.

The language of the nursery knows a few concrete substantives, as *tick-tick* 'clock', *quack-quack* 'duck', *choo-choo* AE = *puff-puff* BE 'train'.

Of words expressive of motion I have only found *jog-jog* 'with a jogging motion' adv, but no substantive or verb.

Non-expressive signs are not usually reduplicated. There are only a few adjectives which, through doubling, acquire a contemptuous nuance, as *goddy-goddy* 'weakly, sentimentally, or affectedly good' 1871, *pretty-pretty* 'affectedly pretty' 1875, *girly-girly* 1891. Cp. F *joli* joli 'pretty-pretty' as against *joli* 'pretty', *train-train* 'monotonous routine' as against *train* 'routine'.

Only used as adjectives are *hush-hush* 1919 (as in a *hush-hush atmosphere*), *never-never* (only in *never never land*, orig. North Queensland in Australia) 1884. As an additive combination is formed *fifty-fifty* 'on a basis of fifty percent each' adv and adj, 1913.

Word-formation cannot treat of unmotivated, i.e. unanalysable words such as *gris-gris* 'kind of amulet' 1763 DA, *foo-foo* 'outsider' (as a term of contempt) 1848 (though perhaps emotively expressive), *tidi* (a shrub) 1827 DA. In English, such words are simple signs. They are not comparable to ablaut and rime combinations which are motivated by their forms.

Reduplicated compounds in English are 19th century and later.

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1 The reader finds a collection of such words in G. Kirchner, Silbenverdoppelung ohne Vokaländerung, Anglia 65 (1941) 328—340.
COMPOUND ADJECTIVES

2.21.1. Types headstròng / gráss-gréén

The first-word is a sb qualifying the adj. Cbs of the headstròng type have the general basis '(strong) in respect of, with regard to... ', etc. The relations underlying the cbs are not as manifold as those with compound sbs. In syntactical cbs they could often be rendered by the prepositions of, from, at, against, sometimes to (threadbare, skintight). Pot-valiant means 'v. thanks to the pot'. Examples are airtight, watertight, bomb-proof, damp-proof, fire-proof, hole-proof, waterproof (and other -proof cbs), colorfast, colorblind, snowblind, moonblind, blood-thirsty, book-learned, brainsick, carefree, heartfree, heartsore, heartsick, lovesick, seasick, homesick, pot-valiant, sleep-drunk, earthfast 'fixed in the ground', pennywise and pound-foolish, pursé-proud, threadbare, blood-guilty, life-weary, battleworthy, praiseworthy, noteworthy, folk-conscious, music-conscious, tone-conscious (conscious is a vogue second-word in AE, and cbs are formed ad libitum).

2.21.2. The relation underlying cbs of the type gráss-gréén is that of emphatic comparison; usually with the implication of highest possible degree. Exs are piping hot, scalding hot, roaring drunk, pig drunk, snow-white, milk-white, purple-red, blood-red, honey-sweet, sky-blue, stock-still, stone-blind, stone-still, stone-deaf, stone-cold, stone-dead, coal-black, pitch-black, pitch-dark. Condensed cpds are mother-naked, brand-new, fire-new 'as new as a piece of iron coming just out of the fire', also cbs such as dog-mad, dog-tired, dog-poor, dog-weary, dog-sick, dog-cheap (the dog-cbs are reduced cpds, so to speak, the implication being 'as mad as a mad dog' etc.). We find individual coinages such as straw-pale, moon-white, moon-still (Thomas Wolfe).

Common are also dimension-denoting adjs as second-words. Exs are knee-deep, skin-deep, breast-high, heaven-high, sky-high, mile-high, nation-wide, world-wide.

2.21.3. Both types are OE. Most PE words, however, were coined in the MoE period. Older are steadfast, earthfast (prob. revived, OED has no quotations between 1000 and 1868), toll-free OE, threadbare 1362, watertight 1387. But it should be noted that words with the sfs -ful and -less and the semi-sfs -like and -worthy originated as cpds of the type headstròng. With the exception of -like words (which are not older than the 15th c.) they were still full compounds in OE. For type grass-green we have many more older words: bloodred, grass-green, honeysweet, milkwhite, snow-white are OE. Later are coal-black 1250, stone-dead 1290, nutbrown 1300, stone-blind 1375, stone-hard 1400 (other stone-cbs are MoE), knee-deep 1400, stock-still 1470. Cbs with dog-do not appear before the 16th c., the earliest recorded being dog-cheap 1526. One of the most recent of the second group is nation-wide 1920 (OED Spl.), coined after world-wide 1632. The type has been spreading recently (faculty wide, city wide etc.).
2. 21. 4. Obs of the headstrong type always have forestress, in preadjunctal as well as predicative or isolated position. The stress indication of Webster and Kenyon-Knott (with double stress) for words with -tight and -proof (airtight, watertight, waterproof) must be a mistake. The second-words have a full stress in explicit contrast only (not watertight but waterproof).

Obs of the type grass-green have double stress, with the usual stress shifting in preadjunctal position. Obs with long for a second-word are only used attributively and are therefore always heard with the main stress on the first-word: age-long, day-long, lifelong, night-long, span-long. The idea of highest possible degree also underlies bank-full, brim-full (though the latter is now partly apprehended as a sf formation with -ful), top-full (cp. also the semantically related syntactic obs crammed full, packed full). In dead tired we have an adj used as primary, in scalding hot the first-word is said to be the vs (OED), but it may as well be the ptc (cp. G kochend heiß, glühend heiß). Otherwise English has no obs with vbs for first-words (pack full is hardly common beside packed full).

In sure-fire AE 1918, we have an inverted cpd, the second element of which is not, however, felt to be connected with the word fire.

As for the difference in stress between the two types, we have the exact parallel in German: cpds such as sorgenfrei, farbenblind have forestress while schneeweiß, stocksteif and others of the ‘grass-green’ type have double stress in absolute or final position and forestress in preadjunctal position.

2. 22. Types all-able / self-adaptive

The type headstrong has a parallel in the type self-adaptive. The adj is qualified by the pronoun self. The general denominator of the notional relation underlying the ob is ‘... in respect of the self’. Exs are self-assertive, -conscious, -defensive -destructive, -elective, -evident, -existent, -forgetful, -glorious, -improvable, -important, -luminous, -pleased, -righteous, -satisfied, -secure, -sufficient and many others. The relation which is, as a matter of course, excluded is the one of emphatic comparison which underlies the type grass-green. Syntactically the relations would be rendered by various prepositions.

The pronoun all, in literary usage, may qualify an adj with the meaning ‘wholly, altogether, infinitely’, as in all-able, all-holy, -bitter, -black, -content, -complete, -fair, -glorious, -just, -merciful.

The type goes back to OE. To this period belong all-holy and almighty. But most of the obs now in use were coined after 1600.

Self-adaptive and all-able have level stress.

2. 23. 1. Types icy-cold / deáft-múte / Anglo-Norman / Anglo-Fréñch

Type icy-cold ‘cold in an icy way’. The first adj is the subjunct of the second. Exs are red-hot, white-hot, red-ripe ‘fully ripe’, worldly-wise, lukewarm. Many obs denote color, the first-word indicating the nuance, as in

dark-blue, dark brown, light blue, light green, blue-black, bluish-gray, reddish brown, whitish brown, whitly-brown | Roman-Catholic, Scotch-Irish, German-Jewish, German-, Irish-, Swedish- etc. American.

2.23.2. Type deaf-mute 'deaf and mute'. These additive (copulative) cpds are rare as far as set cpds are concerned. Bitter-sweet, shabby-genteel and deaf-mute are common, but other cbs are either formed ad hoc or individual coinages formed for stylistic purposes. Shakespeare has many, as honest-true, heavy-thick, odd-even, proper-false, fortunate-unhappy, valiant-young. Other cbs are sweet-sick, real-unreal, haunting-strange, far-faint (Thomas Wolfe), noble-good (Galsworthy). Technical cbs are numerous today: phonetic-semantic, social-economic, allegoric-didactic, tonal-verbal etc. (Hatcher 148).

With ethnic adjs, cbs are frequent. They denote mutual relation (treaty, war or otherwise), as the Prussian-Austrian war, the German-Russian war, the Swedish-Danish relations etc. Another use is represented by cbs like an English-Greek dictionary (always with dictionary as second element).

2.23.3. The types Anglo-Norman and Anglo-French are parallel to the two preceding types, differing from them in that they are coined on a Neo-Latin basis.

The type Anglo-Norman ('pert. to the Normans or their language in England') represents subordinative cpds, the first-word being the subjunct of the second-word: Anglo-French (-Latin), Indo-European, Indo-Chinese, Anglo-Danish 'pert. to the Danes in England', Anglo-Indian and other ethnic names (reference is chiefly to language or descent) are the only representative group, though some of the cbs of the concavo-convex type below may be analysed as subordinative cpds, too.

2.23.4. Type Anglo-French 'English and French, pertaining jointly to the English and French'.

Additive relation is the most frequent. However, the exact relation is often understood from the context only. Exs of ethnic cbs are Anglo-American (-French, -German, -Russian etc., etc.) treaty, agreement, relations or the like. Other possible first-words are Franco-, Graeco-, Russo-, Sino-, Turko-, Gallo-, Indo-

Scientific nomenclature makes extensive use of the type to denote various relations based on the general notion of two elements combined, as in concavo-convex, concavo-concave, plano-concave, politico-economical. Cbs are possible ad libitum, first-words may be given: convexo-, oblongo-, historico-, serio-, dramatico-, economico-, plano-.

The latinizing types are now more or less avoided, except in strictly scholarly (geographical, ethnological, linguistic) parlance. With the idea of 'international relations' the -o form still seems to be predominant, but here also the tendency is probably in favor of the native type, especially when minor international problems are concerned (for an attempt at a description of the various tendencies today see Hatcher 153—159).

2.23.5. The word-order in subordinative cpds is clear: the second-word is the basic part which is modified by the first-word. It would not be possible to change the word order of Anglo-Norman, as in Anglo-Norman language, without changing the meaning of the cb. With cbs of the additive type the case is different. The logical connection would not have been different if the
word-order in Anglo-French were inverted. The preference given to Anglo- as first-word is not due to logical necessity. On the other hand, first-words in -o of ethnic names are restricted. Americo-, Germano-, for instance, are hardly used, nor does a latinizing first-word exist for Japanese, so Japanese will always have the role of a second-word, while the notion 'English' always comes first in the first-word Anglo-, even when an -o form of the second-word exists (as in Anglo-Russian war).

For the native-coined obs, word order is partly determined by psychological factors, the predominant element being named first. This will be the reason for the word-order in German-Russian war (as Germany started the war). In obs of the type an English-Greek dictionary the word-order is not free: the language forming the basis, i.e. the language which is translated, comes first.

All obs have level stress (with the exception of the word bitter-sweet which has forestress).

2. 23. 6. Both Anglo-Norman and Anglo-French go back to Latin ethnic adjs of the type Gallo-Graecus 'Gaul of Greece' (itself influenced by the Greek type Syro-Phoinix 'Phoenician of Syria'). This type was newly started in Modern Latin and has given rise to corresponding types in the modern vernacular languages. The determinative ethnic type is quite infrequent in English before the mid-eighteenth century (Hatcher 152), the earliest instances being Gallo-Greek 1601 and Anglo-Saxon 1610 (Hatcher 198, f. 60). The additive Neo-Latin type (Gallo-Belgicus 'Gallic and Belgic') arose from the determinative one. The originally ethnic pattern assumed an extension of reference at the hands of 16th c. lexicographers by whom it was used in coinages of the type Lexicon Graeco-Latinum. The next step was the extension of reference to bilingual texts in general where the additive idea suggested itself predominantly. As for non-ethnic adjs of the type concavo-convex (see 2. 23. 4), Miss Hatcher assumes influence of the Renaissance word comico-tragicus, itself based on Plautus' tragicomoedia (see Hatcher p. 70 and p. 133 ff.).

In English, the additive type Anglo-French does not occur before the 19th c., the chief period of productivity being the second half of the century, but in Italian and French, the type is older (see Hatcher 151). It is with technical-scientific adjs that additive obs start in Modern Latin and, under its influence, in the modern vernacular languages. English instances are theologico-moral 1644, historico-cabbalistical 1652, physico-mechanical 1661 and many more (see Hatcher 133). Almost at the same time, coinages begin to be made on a native basis (type phonetic-semantic, see 2. 23. 2). The first obs occur, though only sporadically, in the second half of the 17th c. (chiefly terms of natural sciences), as plane-convex 1668, medical-physical 1684. A few more were coined in the 18th c., but the type is not really productive before 1800, and even then the -o type remains stronger. Towards the end of the 19th c., adjs from other than the natural sciences occur (social and economic sciences etc.), as animal-human 1884, divine-human 1892, social-political 1884 (see Hatcher 146—148). As for the 'dictionary' type (see 2. 23. 2), I find English-German Dictionaries attested for 1740 in OED, so this type cannot have sprung form the latinizing type Anglo-French, as Miss Hatcher says (156), but is probably the result of combinations of the type phonetic-semantic.
The native additive type deaf-mute is apparently also partly influenced by the Neo-Latin type Anglo-French. With cbs of anglicized Latin words of the type phonetic-semantic the case looks pretty clear. But modern literary and poetic usage may be a spontaneous rise as well as Shakespeare's use of the type (by Miss Hatcher ascribed to imitation of the OGr type glykypikros). Inspiration from a scientific type does not look plausible. At any rate, the type has never been common. The oldest word, bittersweet 1386, is formed after the just mentioned Greek word. Apart from this word and Shakespeare's coinages, all cbs date from the 19th c. or later.

The type icy-cold does not seem to be older than LME, the earliest cbs I have found being red-hot 1375, lukewarm 1398, wordly-wise c 1400, light-green 1420. The dark- cbs arise in the 18th c. (see OED dark a. 3 c).

2.24. Types heart-breaking / seafaring

form compound participial adjs with a vb/object or vb/subjunct (adverbial complement) as an underlying theme (for analysis see 2.1.4). The types are essentially MoE, with occasional older words such as wayfaring OB (now arch.), seafaring 1200, wind-waving 1300 (next inst. 1848, poet.). Old English knew a literary type lord-bærend which was, however, almost exclusively used for the formation of agent sbs. They were chiefly translations of Latin words such as terricola, agricola and did not "live longer than down to the 13th c." (Kärre 232). The type heart-breaking is the stronger of the two. Cbs are practically unlimited. Exs are heart-piercing, heart-rending, breath-taking, awe-inspiring, freedom-loving, fact-fronting, degree-conferring, earth-shaking, God-fearing, life-giving, mind-filling, soul-stirring, soul-sickening etc., etc.

The word painstaking is exceptional in that the first-word has the plural form; on the other hand, pains is often construed as a singular.

The type sea-faring forms cpds based on the relation 'predicate plus adverbial complement' (chiefly one of place, rarely of time, but also a few others). Exs are wayfaring, sea-going, ocean-going, picture-going, sea-roving, earth-wandering, glass-gazing (Sh) 'preening oneself in a mirror' / night-blooming, summer-flowering, day-flying / law-abiding / Axis-sympathizing.

The stress pattern is × / × though occasionally some speaker will pronounce the word heart-breaking with double stress. The stress is then influenced by emotion. The same emotive stressing may be heard in the pronunciation of the corresponding G word (herzzerreißend), but the majority of speakers will avoid it.

Note: In this connection it is interesting to note that the corresponding German type herzzerreißend is a syntactic group. Cp. such groups as seine leises Grauen erregende Gestalt, einen das ganze Haus aus dem Schlummer reißenden Auftritt etc. The stress pattern is not affected thereby, the ptc is always weakly stressed.

2.25. Types all-bearing / selbst-advertising

The first-word is a pronoun in the types all-bearing and self-advertising. Exs of cbs, which are based on a predicate/object relation, are all-affecting,
II. Compounding

-arranging, -binding, -blessing, -destroying, -embracing, -pervading, -tolerating etc. These cb's have a literary or poetical character. The cpd all-wielding is OE, but otherwise "no examples of this combination occur much before 1600" (OED).

Exs of cb's with self- are self-boasting, -destroying, -giving, -knowing, -killing, -pleasing a.o., all having a literary character. The type is MoE.

With self- we have, however, a stronger type based on a subject/predicate relation, as in self-loading (gun). These cb's are 19th c. and later and all technical terms, applied to devices, apparatuses, self- having the meaning 'automatically'. Exs are self-adjusting, -charging, -closing, -filling, -inking, -registering, -propelling etc., etc.

In well-meaning, well-wishing, ill-boding, ill-willing and occasional other cb's (see OED) we also have a predicate/object relation, the first-words having the function of primaries.

2.26. Type éasy-góิง

Cb's of this type are made up of a first participle determined by an adj (for the analysis see 2.1.4). In Old English there existed a few poetic cb's such as cuic-lifigende, déop-hyegende, héah-sittenende which obviously did not represent a current pattern (Carr does not treat the type). In Late Middle English we meet with occasional coinings such as far-casting 'cunning' 1387, hyghe strowntown 'highswelling' 1398, but the type grows common in MoE only. We include cb's with well, ill, and far which have at all times been both adjs and advs.

Good- (fine-, nice-, odd- etc.) looking, hard-working, high-flying, high-sounding, sweet (-strange etc.) -smelling, quick-cooking, wide-spread, far-reaching, far-seeing, well-sounding, ill-faring, ill-judging a.o.

2.27. 1. Type mán-máde

A second participle is determined by a sb. Though the type has been alive since the OE period (cf. e.g. handworht, goldhroden), the type is somewhat rare in Germanic languages (see Carr 205—209). The corresponding German type is late (see Carr 206) and very weak (see Henzen 67). Its productivity has been most in evidence in the MoE period, esp. since the 19th c. Most words, for instance, with the first-words earth, god, man, iron, and, quite naturally, machine date from the 19th c., while we- words were frequent in 17th and 18th c. literature (see OED s.v. wee).

No PE word seems to be older than ME (hand-wrought c 1000, next 1881 is obviously a revival). Exs are moss-grown 1300, woe-begone 13.. (woe-beseen 1390, woe-bested 1470), moth-eaten 1377, wind-driven 1387, worm-eaten 1398, iron-branded 1400, book-learned 1420. More recent are frost-bitten, hunger-bitten, wind-bound, wind-shaken, storm-beaten, tongue-tied, god-made, home-bred, home-born, homespun, heaven-born, hidebound (16th c.), god-begotten, god-inspired, god-forbidden, awe-struck, sun-baked, sun-dried, earth-bound, hand-made (17th c.), spell-bound, skin-bound, wayworn, heartfelt (18th c.), conscience-stricken 1819, horror-stricken 1805, poverty-stricken (Dickens) 1844, god-forsaken 1856.

Cb's are practically unlimited today, especially as technical terms. A few instances of quite recent cb's are factory-packed, war-battered, government-owned, seaborne, airborne, carrierborne, communist infiltrated.
Participial cpd adjs are chiefly based on a passive verbal nexus. The most frequent underlying concept is that of the passive participle determined by a converted subject (as in man-made 'made by man'). It is the regular concept underlying cbs with all- and self-. But there are also other verbal nexus relations. The determinant may be a subjunct, standing to the pt in the syntactic relation of an adverbal complement.

Instrumental relation underlies moss-grown and star-spangled, but iron-clad is 'clad in iron', diamond-cut may be 'cut into the shape of a d.' or 'cut with facets like a d.' Similar is table-cut (said of a diamond) 'cut in the form of a table', custom-built AE, custom-made AE mean 'built, made to the customer's order'. Is death-doomed 'doomed to d.' or 'by d.'? Shard-torn is 'torn to shards', safety tested is 'tested for safety'.

2.27.2. A somewhat larger group is represented by the type word home-bred where the underlying notion is that of place. Exs are home-made, homespun, hill-born, world-renowned, heart-felt, heaven-born, home-born, sea-born, London-trained.

2.27.3. There is a small group of cpds characterized by the type word crest-fallen, prob. to be analysed as 'with the crest fallen'. I have no exs earlier than the close of the 16th c.: crest-fallen, chap-fallen = chop-fallen, jaw-fallen, heart-broken, tip-tilted, obs. trade-fallen 'bankrupt', oil-dried (lamp, Sh), hip-shot 'having the hip shot, i.e. out of joint'.

The second-word of bed-ridden is orig. not a ptc, but a ME extension of OE rida 'rider'. It was analysed as 'confined to bed, at the mercy of the bed, dominated, governed by the bed' and has attracted priest-ridden, class-ridden, germ-ridden a.o.

2.28.1. Types all-abhórred / sélf-bórn

Participles may also be determined by the pronouns all and self. The pronouns function as converted subjects.

all-abhórred, all-admired, all-dreaded. The type is much weaker than type all-bearing and, according to OED, rare before Shakespeare.

self-born 1587 (the earliest quotation in OED), self-abased, self-appointed, self-elected, self-governed, self-made, self-possessed, self-taught a.o.

2.28.2. The basic stress pattern 2/2 is regular only with all- and self- cbs. Many cbs of the type man-made are, however, always heard with forestress (e.g. moth-eaten, spellbound, frost-bitten / homespun, heart-felt, heart-broken). For the speech-feeling they have obviously syncretized to a higher degree than e.g. home-made, home-bred, custom-built, government-owned, factory-packed which have more of an ad hoc character and therefore show the double-stress pattern (in predicative position). Cpd's of the type crest-fallen always have forestress.

2.29.1. Type high-bórn

Historically speaking, the type high-born combines several older syntactic types: 1) the first-word is historically an adverb, as in new-born; 2) the first-word is historically an adj used as subjunct, as in fresh-clad; 3) the first-word
is historically an adj used as a predicate complement, as in \textit{dead-born}. OE adjs formed their adverbs in \textit{-e} (\textit{heard|heardē, déop|dēope}). But adverbs were not distinct from the adjs when the adj ended in \textit{-e} (\textit{clēne, déore} are both adj and adv), and there were others, as \textit{hēah} 'high' which were adjs as well as advs. The loss of adverbial \textit{-e} in ME obliterated all distinction between adjs and advs. This fusion of various morphological types paved the way for the establishing of a derivative pattern. For several centuries back, English has had a type of adjective compound consisting of a second participle determined by an adj, which is the only fact relevant to synchronic analysis. The underlying concept may often defy an undisputed analysis, a fact we have observed with other opd types, too. In \textit{high-born}, \textit{low-born} the first-words may be considered as predicatives or as subjuncts, and similar difficulties arise for other ops.

The oldest examples which are in use today date from the ME period: \textit{new-born} 1300, \textit{new-clad} 1300, \textit{high-born} 1300 (but the next quotation in OED is from 1728), \textit{dead-born} 1330, \textit{free-born} 1340, \textit{new-sown} 1375, \textit{hard-set} 1387, \textit{high-set} 1382 (next quotation from 1631). But the formative power of the \textit{w}f type does not really start before the second half of the 16th c., and most present-day cpds are much more recent.

\textit{Clean-out, clean shaven, deep out, deep drawn, deep read, deep seated, deep set, far gone, far fetched, foreign built, fresh clad, fresh oiled, high set, high strung, low bred, modern built, new found, new laid, still born, true born, widespread, ready made.}

2. 29. 2. Most of the cpds whose second-word is a second ptc have a passive meaning. This is practically the rule with transitive verbs. Exs of cpds with ptcs of transitive vbs that have an active meaning are few in number. One group are cpds with \textit{spoken} for a second-word, the earliest recorded (of the whole group) being \textit{fair-spoken} and \textit{well-spoken} (1460), followed by \textit{broad-}, \textit{civil-}, \textit{free-}, \textit{plain-}, \textit{out-}, \textit{short-}, \textit{soft-}. Other cpds are \textit{well-read}, \textit{best-read} (read alone, first recorded 1586, is no longer in use), \textit{well-behaved}, \textit{better behaved} (the OED has one quotation for \textit{behaved} alone; as a transitive vb, \textit{behave} is extinct now), \textit{hard-bitten} 'given to hard biting'. Though the word is no cpd, we may mention \textit{learned} here. In OE and ME the vb \textit{learn} had the meaning 'teach', so \textit{learned} is orig. 'taught, instructed', but was subsequently apprehended as the ptc of \textit{learn} in present-day meaning and attracted \textit{studied} (1530) and perh. also \textit{read} (see above). Op. also G ein gelernter Arbeiter, ein studierter Mann, ein belesener Mensch. Other exs are \textit{far gone, new come, high flown.}

Second participles of intransitive vbs occur as early as OE. The only \textit{e}b that has come down to our day is \textit{new-come}. The other \textit{e}bs used today are MoE: \textit{high-flown}, \textit{crest-} (\textit{jaw-}, \textit{chap-}, \textit{chop-}) \textit{fallen}, \textit{well-traveled}, \textit{far-traveled}, \textit{un-traveled} (\textit{traveled} is first recorded 1413), \textit{well-judged}, its opposite \textit{ill-judged}. In recent American journalese we find \textit{e}bs such as \textit{star-turned}, \textit{debutante-turned}. We have, however, ME \textit{e}bs with locative particles for a first-word, such as \textit{by-gone, by-post}, while \textit{ingrown} is rec. from the 17th c. For the present-day speech-feeling \textit{short-lived} and \textit{long-lived} belong in the group, though, historically, the second-word is \textit{life} plus \textit{-ed}, with the voiceless fricative voiced (therefore still often pronounced [lauv]), see Jesp. VI. 24. 12 and Linguistica 378f.).
COMPOUND AND PSEUDO-COMPOUND VERBS

Introductory remarks about compound verbs

2.30. Compounds are morphological units consisting of independent morphemes, i.e. words (such as rainbow, colorblind). Such combinations are necessarily based on a determinant/determinatum relationship: rain determines bow, as color determines blind. I have discussed elsewhere the question of nominal compounds. If now we look for verbal compounds, applying the criterion just stated, it will be clear from the outset that the only type of verbal compounds fitting the description are verbs with a locative particle for a determinant (as overdo, outstare, underestimate). Not all locative particles form verbs. Those which have derivative force are over, under, and out. We will give a description of these types first.

2.31.1. out-

With a locative meaning, the particle has never had any derivative force. Verbs of the type outbreak 'break out' occur only in poetry and are equivalent to pro combinations of the phrasal type break out. Such compounds as outbear, outburn, outride, outroll, outstretch, outspread, outthrow therefore are not relevant to the derivative system.

2.31.2. It is with verbs of the type outbid 'bid more than (another person)' that the particle has become productive. The type obviously originated in situations where an encounter took place and where one of the participants was put 'out' of competition. A competitive element is usually involved so that most verbs are analysable as 'outdo in -ing'. There are a few cases where the non-competitive idea of 'surpassing a person in some reciprocal action' is expressed, as in outlive 'live longer than', outgrow 'grow faster than (another person)', outstay 'stay longer than', but these verbs form a minority.

2.31.3. The first combinations occur in the second half of the 15th century: outlive 1472, outproffer 'outbid' 1494 (obsolete). The type slowly grows in the 16th century and is fully developed about 1600. Outcry, outface, outgo, outride, outrun, outshoot are recorded from the first decades of the 16th century, while the second half of the same century is instanced by such coinages as outbid, outbrag, outbrave, outdare, outgrow, outlast, outlook, outreach, outshine, outstare. 17th c. words are outbaffle, outblush, outdo, outdrive, outfight, outlaugh, outmarch, outmatch, outsail, outsell, outshriil, outsing, outstride, outtravel, outwalk, outwatch, outwork, outwite. More recent are outargue, outblaze, outburn, outdazzle, outmaneuver (18th c.), outstrip 'outdo in stripping' 1868.

1 See 2.1.
2.31.4. Denominal verbs, chiefly coined after 1600, have the meaning ‘exceed, excel, surpass with regard to (the characteristic attributes of) . . . ’, as overwhelm, outrival, outvote, outwit (17th c.), outgeneral, outjockey (18th c.), outclass, outdistance, outrange, out-Yankee DA (19th c.).

We have a semantic variant of the type in the military terms outwing 1648 and outflank 1765.

2.31.5. Of deadjectival verbs, only outsmart (coll. AE, not in OED, Spl., DAE, DA) is common, while 17th c. coinages such as outactive, outblack, outswift were shortlived.

2.31.6. Shakespeare’s it out-Herods Herod (Hamlet 3.2.16) gave rise to a few imitations in the 17th c. (Fuller) and in the 18th (Swift). But it was in the 19th c. that such combinations were “used almost without limit” (OED s.v. out- in comb.). They have a literary character.

2.31.7. In a few verbs governing an object of the thing we have the meaning ‘. . . beyond the end of (what is denoted by the object)’, as in outwear (clothes) 1641, outgrow (clothes, habits, opinions) 1665, outsit (time) 1658, outsit (time) 1530, outstay (time, patience, welcome, an invitation) 1600 but the common word for the latter is overstay.

2.32.1. over-

As far back as Old English over- was an ‘inseparable prefix’ with many verbs, as Harrison’s material1 shows. Semantically, we can distinguish several groups in PE usage. Verbs of the type overshadow imply the meaning ‘perform the action so as to cover (what is denoted by the object of the verb)’. The group goes back to Old English. Examples are overbridge, overflow, overnight, overshadow, overshine, oversow, overswim, overspread (OE), overcover, overfold, overgrow, overlay, overlie, overstride (ME), overcloud, overfilm, overfly, overglide, overshrout, overspan, oversprinkle, overstrew, overwarm (16th c.), overflow, overflutter, overmask, oversnow, overstream, oversweep, overwite (17th c.), oversleeve, overgloom (18th c.), overflood, overnet, overroof, oversmoke, overwrap (19th c.). In Modern English use, the type belongs to elevated literary or poetic language.

In overhear, oversee (OE), overlook 1369, overpeer 1583, overlisten 1609 we have a figurative semantic variant of ‘covering’.

2.32.2. The type override ‘ride over, overhead, beyond’ has formed overcome, overlap, override, overrun, overstep (OE), overstride 1200, overpass 1297, overblow 1385, overspring 1386, overjump 1608. Already in Old English, such verbs frequently connoted the idea of ‘disturbed equilibrium, defeating, crushing’, originally both in a material and a figurative sense. In Modern English, the latter meaning is predominant. The type is instanced by overcome, overwin ‘conquer’ (obs. or dial.), overrun (OE), overmaster 1340, oversail (sense now obsolete) 1449, overawe, overbear, overpower, overrule, overtone, overtrample, overwhelm (16th c.), overpower 1624, overtower 1831, all with the basic meaning ‘overpower, defeat, dominate, prevail over’.

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2.32.3. Another aspect of the idea ‘disturbed equilibrium’ is the sense ‘upset’ which is no longer productive but which has formed a number of verbs, as overthrow, overset, overtumble, overturn, overwhelming (all 14th c. in this sense), overtopple, overblow (16th c. in this sense).

2.32.4. A small group of verbs convey the (now only figurative or poetic) meaning ‘over the brim or edge’, as overflow OE, overboil, overbrim (17th c. in this sense), overbubble, overburst, overwell (19th c.).

A semantic variant of the type override is the type overreach ‘... beyond a certain point, limit etc.’ which proved only a little stronger than the competing type outlive. It has coined such verbs as overreach 1300, overstretch 1330, overrise 1350 (now rare), overshoot 1369, and the only verb which is now common, overstay 1646, in use with a personal object overlive ‘live longer than’ OE (now rare and arch.).

2.32.5. Over- has unsuccessfully rivaled out- in combinations of the type overbid ‘outbid, surpass a person in -ing’. Examples are overleap 1340 (obs.), overrun 1400 (now rare), overshine 1588 (in this sense), overdo 1625 (in this sense), overbid 1645, all rare or archaic. We also find denominal coinages, all nonce-words such as overbulk 1606, over-multitude 1634, over-MacPherson (Macpherson) 1826 (see OED over 22).

2.32.6. The particle has achieved its real productivity with the type overdo ‘do beyond the proper limit, to excess’. Examples are overdo, overdink (OE), overcharge, overheat, overlade, overpraise, overrun, oversleep (ME) and numerous later words such as overbend, overbid, overcount, overcam, overeat, overfeed, overlift, overload, overcharge, overpay, overplay. “By 1600 it had become allowable to prefix over- to any vb whose sense admitted of it” (OED over 27).

Overtake 1225 is unexplained. It may originally have been used of a falcon or other bird of prey chasing a quarry and finally ‘over-taking’ it. Formatively then, the verb would belong to the type overshadow.

2.33.1. under-

With a locative meaning, the particle was an inseparable preverb as early as Old English, though most of the coinings were imitations of Latin sub- verbs. This latinizing practice also prevails in the earlier Wycliffite version of the Bible. With verbs of general currency, however, under- has never become productive so that present usage knows only a very few combinations of which several are no longer analysable as compounds.

2.33.2. Patterned on Latin verbs were, for example, OE underberan ‘supportare’, undercuman ‘subvenire’, undercreep ‘subcrepere’ 1440—1642, understrew ‘substernere’ 1382—1589. Underwrite also (rec. 1430), now only used with a specialized meaning, was coined as a rendering of L subscribere. It attracted undersign 1580, now not used as a full verb. A locative meaning must originally have underlain understand OE and undertake (rec. about 1200 as a replacement of earlier underniman). While underwrite, undersign, and several of the latinizing coinages were an attempt to establish the semantic pattern ‘... below or beneath what is denoted by the object of the verb’, the only full verbs
commonly used are underline 1721 and underscore 1771. Technical terms of the same type are underrun 1547 and underdrain 1805. A figurative variant of the pattern is underlie, in its current meaning recorded only since about 1860, a semantic development of the verb as a geological term (about 1600, used of strata). Formally, the verb is Old English where it meant ‘be subject to’.

2.33.3. An arrested group is the one meaning ‘destroy’, instantiated by undergo in the obs. sense ‘undermine’ 1000—1642, undermine 13... undercat 1382, underwork (now obs. in this sense) 1504—1659, undercreep ‘subvert’ 1592—1623. Its positive counterpart, the ‘support’ group, has proved stronger, though chiefly in the formation of technical terms. The oldest meaning of underlay OE is ‘support’. The following verbs joined it later: underset 1220, undershore ‘prop up’ 1399, underprop 1513, underpin 1522 (this is the only verb of the group which is now also used in general parlance), undergird 1526, underbuild 1610, underarch 1611, underfloor 1778, underdraw 1843.

2.33.4. The foregoing description shows that the derivative yield of under with a locative meaning has been so slight as to be non-relevant to word-formation as a grammatical category. The picture is quite different with the type underbid ‘... below a fixed norm, below standard, at a lower rate than, at too low a rate’. This derivative pattern does not seem to be older than the close of the 16th century. It is probably patterned on its older counterpart overdo, but it is less productive than it. Examples are underbid 1593, undervalue 1596, underdo, undersell, underrate, underact, underwork (17th c.). More recent are understate, underestimate, underbuy, underexpose, underpay, undercapitalize, underquote, undertrump (card playing term), undershoot. Some verbs are represented by second participles only, as underclad, underbred, underfed, undernourished, underpopulated, undercooled.

Introductory remarks about pseudo-compound verbs

2.34.1. While verbs formed with preparticles are compounds insofar as they consist of two independent words, formally speaking, we note that the particles do not behave like substantives, adjectives, and verbs as first elements of compounds. Full words ordinarily do not change semantically when they become constituents of compounds. The head of headache and the rain of rainbow have the same semantic features as head and rain. Derivatively productive verbal particles, however, are not used with any of the meanings the particles have as independent adverbs. Independent over does not mean ‘excessively’ as does the particle in overrate, overdo; under is not used in the sense of ‘below standard, insufficiently’ which the preverb conveys in underpay, underestimate. This attitude of the language towards full words as preverbs is probably one of the reasons why the types underline and overcloud, where the particle has a locative meaning (weakened as it is), have long ceased to be productive. Another reason is that locative adverbs had come to be placed after the verb. Even the weakened locative meaning of the preceding types

seems to have made the particle undesirable for verbal composition. Such a reducing of the full word value brings the locative particles nearer to prefixes with which they also have the stress pattern in common. While particles as well as prefixes have full stress, phonemically speaking, the most frequently occurring variant is that of middle stress: *ou-t-do* is stressed like *un-do*¹.

2.34.2. With the exception of verbs with preposed particles, verbal composition did not occur in Old English and does not seem to have existed in Germanic at all. Wilmanns² has a very few isolated instances from Old High German and one from Gothic for verbs with a substantive for a first-word. Of adjectives, OHG *volle* ‘full’ (127—128) formed verbal compounds (the type is dead in Modern High German), but the case of *eben* (128) is doubtful, as compounds of the type may have been influenced by Latin *co-* verbs. Verbal composition does not exist in present-day English either, though such verbs as *spotlight, blacklist, stagemanager* seem to contradict us. There is a basic difference between preffixal and preparticle verbs like *undo, overdo* on the one hand and composite verbs of the just mentioned kind on the other, as we have already pointed out. While *un-do, over-do* are analysable as determinant/determinatum groups, verbs of the *spotlight* type are essentially verbs with a zero determinatum, the determinant being the full underlying basis: *to spotlight* is ‘(to turn) the spotlights on . . . ’, *to stagemanager* is ‘(to act like a) stagemanager’ and so forth. Considering this we have to say that composite verbs other than preparticle verbs are actually derivatives from nominal composites.

2.35.1. Two main groups of verbal pseudo-compounds occur:

A: the verb is derived from a nominal compound (which is almost always a substantive). 1) the type *spotlight* (sb/sb); 2) the type *blacklist* (adj/sb), also occurring as a syntactic group of the type *cold shoulder*. For minor types see below.

B: the verb is derived from a synthetic compound, either 1) an agent noun, as in the type *stage-manager* from *stage-manager*, or 2) an ‘action noun’, as in the type *playact* from *playacting*, or 3) a participial adjective, as in the type *spoonfeed* from *spoonfed, resp. new-create*₁ *new-created*.

2.35.2. This latter process is often called backformation. It is distinguished from the A group only by the dropping of the functional morpheme of the basis and by the morphologically important fact that the second element is verbal. But essentially we have derivation from a composite basis in both groups, and it therefore matters very little that in some cases we cannot exactly tell what the basis is: the verb *firehunt* may go back either to *firehunting sb* or *firehunt sb*, *roughcast* may be derived either from *rough cast sb* or from the participial adjective *rough cast*.

¹ See 3.1.16—18.
2. 35. 3. All the verbs listed below I have found recorded or have heard in characteristic forms, as we dryfarm, to topdress, where the help of nominal forms is excluded. Participles like waterlogged, double-dyed, or substantival ringbarking, dryfarming which are based on nominal word-formation types of old standing would not prove the existence of the verb. For this reason I have excluded several words for which dictionary records have nominal forms only (as crabsidle, double-bitt OED).

2. 35. 4. Derivation of verbs from compound substantives is old in the Germanic languages. Gothic as well as Old High German and Old English know such derivatives, although the type is comparatively weak in all three. A treatment of the subject in English does not seem to exist. Two works dealing with derivation by a zero morpheme do not treat of derivation from composites, perhaps because the authors did not realize that pseudo-compound verbs should fall under 'conversion' or 'functional change'. My lists are based on a systematic compilation from the Shorter Oxford English Dictionary and the Dictionary of Americanisms, on additional searches in the Oxford English Dictionary, on material collected in personal reading and words overheard in the spoken language. The purpose of this chapter is chiefly to give a structural description of the types, not a description of 'good' usage. However, some questions of usage will be discussed below.

2. 36. Types spotlight / blacklist / cold-shoulder

2. 36. 1. Let us first examine the A group. As the list shows, there is hardly any derivation before about 1550, very little in the 17th and 18th centuries, while we observe an enormous productivity in the 19th century which is continued in our time. The great role American English plays in the development of the types is evidenced by the large number of combinations (based on the Dictionary of Americanisms) first found in U.S., all 19th and 20th century words. Though the type is Old English, on principle, there appears to be a break in the development, Very few OE words seem to have survived into the Middle English period. OE examples are edleaman 'requisite' from edleam 'reward', deödbætan 'repent, atone' from deödbót 'repentance, reparation', mānsweadian 'swear falsely' from mānswaru 'perjury', gemündbyrdan 'protect' from munbyrd 'protector', gödspellan 'preach the gospel' from gödspell 'gospel', aðlagian 'outlaw' from aðlaga, wilcumian 'call 'welcome guest', welcome' from wil-cuma (lit.) 'pleasure-comer, welcome guest'. A case of deadjectival derivation is ärweorðian 'honor' from ärweorð 'honorable'. Of the preceding words, outlaw and welcome have survived to the present day but welcome is no longer analysable as a compound. A Middle English coinage now obsolete is wanhope 'despair' (1300—1425) from wanhope. Trothplight 'plight one's troth to engage in order to marry' c 1440 from trothplight sb is archaic now. We may add safeguard 1494 (sb 1421).

1 For Gothic and Old High German see W. Wilmanns, op. cit. 119—121.
2. 36. 2. The following verbs are recorded in the 16th century: weatherboard 1535, nickname 1536, roughcast 1565, drynurse 1581, shipwreck 1589, whitewash 1591, football 1599. The verb safe-conduct was in use for some time (1564—1639, sb 1297).

In the 17th century we find elbow 1605, earmark 1641, footmark 1641, shoe-horn 1650, dovetail 1657, dead color 1668, pickpocket 1673, hamstring 1675, snowball 1684, tiptoe 1661, obs. side-box 1689.

From the 18th century are handcuff 1720, iron-mould 1727, footpad 1735, trenchplow 1738, ringfence 1769, honeycomb 1774, sidesaddle 1778, wetnurse 1784, outline 1790, sweetheart 1798.

2. 36. 3. The nineteenth century is represented by such verbs as skylark 1809, loophole 1810, honeymoon 1821, double-shot (military term; 1824), blackbook 1828, buttonhole 1828, spread-eagle 1829, jogtrot 1837, pitchfork 1837, sideline 1837 (American English in OED Suppl.), outfit 1840, soft-soap 1840, waterproof 1841, cold-shoulder 1845, sandpaper 1846, rough-board 1849, footprint 1850, fantail 1851, hallmark 1852, butt-end ‘knockdown’ 1859, court-martial 1859, sandbag 1860, pigeonhole 1861, footnote 1864, watermark 1866, fireproof 1867, leapfrog 1872, roller-skate 1874, butterfly 1875, roughdraft 1879, blackmail 1880, deadlock 1880, snowshoe 1880, blacklist 1884, daydream 1884, dry-dock 1884, hero-worship 1884, fair-copy 1885, sideslip 1887, nursery-maid 1899, pinprick 1899.

More recent are side-glance 1901, side-step 1901, week-end 1901, free-wheel 1903, double-cross 1904, streamline 1913, upgrade 1920, wisecrack 1924, soft-pedal 1926, spotlight 1926. The actual trend, however, is more truly illustrated by the list of American English examples. The following list of verbs first recorded in this country is based chiefly on the DA:

2. 36. 4. Clapboard ‘cover with clapboards’ 1637, cow-skin ‘whip with a c.’ 1799, jackknife 1806, firehunt 1814, brickbat 1833, war-whoop 1837, bulldog ‘attack like a b.’ 1842, crawfish ‘move backwards, move out of a position’ 1842, whipsaw ‘cut with a w., cheat’ 1842, sleighride 1845, deadhead 1854, flatboat 1858, railroad 1858, rawhide ‘whip with a r.’ 1858, double-quick 1862, horsefiddle 1863, tree-toad 1866, baseball 1867, double-track 1867, blacksnake ‘lash with a b. whip’ 1870, homestead ‘become a settler on a h. land’ 1872, groundsluice ‘wash down earth by means of sluices’ 1875, grubstake ‘supply with a g. = provisions given to a prospector as a stake in his findings’ 1879, backcap ‘depreciate’ sl 1889, sidetrack 1880, bobsled 1883, bushhammer ‘dress stone with a b.’ 1884, saddlebag 1884, backfire 1886, tenderfoot 1886, nekwork 1887, bellyache ‘grumble’ vulg. 1889, scorehead ‘give a story a prominent headline’ 1889, skyrocket 1889 (Cent. Dict. q. American Speech 18 (1943) 65), singlefoot 1890, rubberneck 1896.

Gold-brick ‘swindle’ sl 1902, moonshine 1902, roughhouse 1902, pussyfoot 1903, shorthand 1903, strong-arm 1903, backtrack 1904, double-head (railroad term) 1904, blackjack ‘strike with a blackjack’ 1905, whitecap 1908, cakewalk 1909, gumshoe ‘sneak about in gumshoes’ 1912, headline 1912, joy-ride 1915, catfoot 1916, backstop (baseball term) 1918, fair-ground (hunting term in the West) 1920, footstrot 1921, Jim Crow 1923, back number ‘treat as a back number’ 1924, backtrail 1924, highhat 1926, lipstick ‘paint the lips’ 1926, hightail 1927,

2. 36. 5. While derivatives from substantives of the spotlight and blacklist types form the majority, as we have pointed out before, the preceding list also instances a few other patterns. Of the type joyride (sb/deverbal sb) we have sleighride, horseback-ride, crosscheck, spotcheck, firehunt, butterfly-chase, heroworship, foxtrot, shipwreck, moonshine, sideslip, with an adjectival first-word whitewash, roughcast, wisecrack. The type leapfrog (deverbal sb/sb) is represented by whipsaw, headread, pitchfork. Outline and outfit have a locative particle for a first element. To various other types belong pickpocket, doublequick, tiptoe, and upend 1823, according to OED originally a dialect word. Derivation from compound adjectives is almost non-existent. Only -proof words seem to occur, as waterproof, fireproof, soundproof.

2. 37. Types stâgemânage / playâct / spoonfeèd

2. 37. 1. The picture of the B group is similar to that of the A group, though there are fewer words. The possible reasons for this we shall discuss later. We have few coinages before about 1550, some increase in productivity in the 17th century (esp. of the type new-create), infrequent new formations in the 18th century, an upsurge in the 19th and 20th centuries.

Middle English coinages are blindfold (orig. blindjellen (fell =) strike blind) a 1225, backbite c 1300 and the now obs. hungerstarve 1390—1610. The following verbs are first recorded in the 16th century: rough-hew 1530, sunburn 1530, wayfare (now rare and arch.) 1547, tonguetie 1557, backslide 1581, wiredraw 1598.

2. 37. 2. The 17th century is represented by double-dye 1602 (the OED has several other verbs from about 1600, which seems to indicate that double-verbs were vogue words at that time), browbeat 1603, flyblow 1603, winterfeed 1605, eavesdrop 1606, frostbite 1611, thunderstrike 1613, spoonfeed 1615, stargaze 1626, hidebind 1642, housewarm 1666, rough-grind 1660, hempeck 1688. The type new-create from new-created was very productive in the 17th century: new-create 1604, new-form 1610, new-furnish 1611, new-make 1617, new-cast 1650, new-mould 1650, new-model 1665, new-coin 1700.

Coinages of the 18th century are smokedry 1704, clear-starch 1709, merrymake (rare) 1714, bogtrot 1734, stallfeed 1763, case-harden 1771, waterlog 1779, ill-treat 1794.
2.37.3. 19th century words are horrorstrike (rare) 1811, winterkill 1817, Shelley’s housebreak, sheepsteal, and shoplift 1820, sightsee 1835, roughhay 1837, bushwhack 1834 DA, logroll 1835 DA, halterbreak 1837 DA, housekeep 1842, bootlick 1845 DA, awestreike 1850, topdress 1852, stillhunt 1858 DA, unanalysable jayhawk 1866, carpetbag 1872 DA, closeherd 1874 DA, stagemanage 1879, wirepull 1883, globetrot 1883, dressmake 1885, moonlight 1887, typewrite 1887, ringbark 1887, roughride 1890, sheepwash 1891, backpeddle 1891, springclean 1894, hogtie 1894 DA, thoughtread 1898, handshake 1898, dryclean 1899.

2.37.4. Our century has coined drayhaul 1902 DA, sightread 1903, nightherd 1903 DA (West. AE), shopwalk 1905 (Wells), wildcat 1903 DA, bootleg 1906 DA, muckrake 1910 DA, drywash 1912 DA, dryfarm 1917 DA (West. AE), jerrybuild 1918, sleepwalk 1923, hitchhike 1923 DA, hoccall 1927 DA, ghostwrite 1928 DA, pinchhit 1931 DA, proofread 1934 DA, sharecrop 1937 DA, baby-sit 1947 (American Speech 24 (1949) 72), chainsmoke 1946 (American Speech 21 (1946) 148), copyread 1945 (American Speech 21 (1946) 148). Webster (1955) lists playact (which is very common) and handpick (which is less common), but none of the standard dictionaries (OED and Spl., DAE, DA) records them. I have heard applepolish, double-park (not even applepolisher and double-parking are in the just mentioned dictionaries, Webster included), taperecord, vacuum-clean, brainwash, housebreak (speaking of dogs), though I have not come across them in print.

The commonly used verb bottlefeed is in none of the Standard dictionaries while breastfeed is recorded in OED Spl. for 1928.

Comparison between the two groups

2.38.1. The smaller number of B group verbs as against coinages of the A group seems natural if we consider that nominal compounds of the spotlight and blacklist type are probably more frequent than synthetic compounds of the types stage-manager, play-acting, and spoonfed. Another important factor is the composition of synthetic compounds: the second element (in most cases) is a verb, so a consistent derivation and use of these composites would involve a real compound verb type, based on a determinant/determinatum relationship, a grammatical change of great structural implications (see above). Traditional linguistic habits tend to prevent speakers from breaking up old syntactic patterns by which verbal complements follow the verb in sentences. People do not usually cardrive, taxpay, wirepull, housekeep, or merrymake, but drive cars, pay taxes, pull wires, keep house, and make merry. With combinations which are unmotivated for the speaker, there is of course less hesitation. Bootleg, browbeat, eavesdrop, henpeck, blackmail, petitifog, partake, freeboot are such examples.

2.38.2. The more the basis is felt to have a particular meaning, the more likely it is to derive a full verb. This is especially the case with technical terms, only used in a certain environment. Topdressing is not just any dressing of some top, but has a very definite meaning for farmers and road builders. In the jargon of farming and road construction therefore, topdress is used as a full
verb. But a housewife who dresses the top of a cake she has baked will probably not use the verb topdress for the process. Similar considerations apply to many of the verbs given in the preceding lists. Nightherd, closeherd, halterbreak, logroll, stillhunt are tied up with certain very definite ways of American life, winterfeed, stallfeed, winterkill, smokedry are terms used by farmers, only mechanics spot-drill, spot-face, spot-grind, spot-mill, dead-melt, or spot-weld.

2.38.3. At the present stage of the language, speakers who use a pseudo-compound verb are aware that they are deriving it from a nominal composite basis. Therefore, although people housebreak dogs or proofread, they will not bookread, letterread, promisebreak, or cupbreak. That an occasionally used verb handpick can be analysed as ‘pick by hand’, is linguistically not relevant. The speaker who uses it derives the verb from the adjective handpicked which is stored in his linguistic memory. One does not say ‘handpick’ berries, cotton or the like when one simply wants to say that the picking was done by hand. Considering the four century old history of the verbs under discussion, it does not seem that the existence of the several pseudo-compound verbs will bring about a genuine compound verb type.

2.38.4. Derivatives from group verbs whose second element is a primary noun, i.e. A group verbs with the exception of the type joyride, are structurally far less objectionable and used more freely, as they are only one step farther than the simple desubstantival type father vb from father sb. That in this group, too, many combinations are technical terms only, is not an objection of principle. The problem is not of a derivative but of a semantic nature, which arises also with simple denominal verbs. Bark (trees), fin, gill, gut, scale (fish), stone (fruit), worm (plants) are all technical terms, used in particular environments only.

2.38.5. Pseudo-compound verbs have been steadily increasing in Modern English, especially since the beginning of the 19th century. Their growth, however, has been largely on the colloquial or slang level. This is one of the reasons why they are still not really established in literary usage, though even educated speakers use them in conversation. Many people are hesitant about them, consciously or unconsciously considering them to be ‘not good English’. This is the usual attitude of speakers towards new linguistic trends. That some new formations have a “transitory status” and others show “a nuance of humor”¹ is not disputed, but it hardly characterizes the group as a whole.

2.38.6. B group verbs containing a strong verb as the second element usually follow its pattern of conjugation. There has been some vacillation in usage (see H. W. Fowler in S. P. E. Tracts 19, 1925). They broadcasted may be heard besides more common they broadcasted (I broadcasted from the New York studio, John P. Marquand, Melville Goodwin, USA. Boston 1951, p. 3). Erroaneous analysis may lead to hamstring though the second element is not the verb string. In German, verbs derived from composites always follow the weak conjugation: sie handhabten, ratschlagten, willfahrten, for instance, and the

prefix *ge-* is placed before the whole combination: *gefrühstückt, gehandhabt, geliebkost*. But for English, Jespersen’s statement that “new-formed verbs are usually weakly inflected” (MEG VI. 6. 83 note) is not correct. One would probably never say *I typewrited, he housebroke*. The tendency to pattern the composite after the second verbal element has always been prevalent. Thus, although weak forms are cited in the OED for *backbite*, yet *backbited* ptc 1393 and *backbited* pret. 1496 are isolated among the inflected forms which follow the strong conjugation.

2. 38. 7. The stress of pseudo-compound verbs depends on the stress of the underlying nominal basis: the verb has the same stress as the nominal composite from which it is derived. Some nominal compounds have a stable pattern, as *stágemánager, play-ácting, joý-ríde, leáp-fróg*\(^1\) which the verbs preserve (*stágemánage, típewríte, playáct, springcléán, joýríde, spótchëck, leápfróg, pitchfrórk*). Verbs of the *spotlight* type are almost all derived from forestressed compounds: *spótlight, éármárk, snoübál* etc. Some verbs derived from an adj/sb basis follow the forestressed *blacklist* type: *blácklist, rougghhouse, híghhát* etc., but others are derived from syntactic groups, as *cóld shouldér, doublé cróss*. As the adjective usually has a positional middle stress, the verb has one, too: *cóld shouldér, doublé cróss*. Participial adjectives have two full stresses, phonemically speaking. Dictionaries in such cases speak of variable stress. The derived verb, therefore, has no stable pattern. Such adjectives as are commonly forestressed will derive a verb with the same pattern (e.g. *spóolfééd, spélfánd, tónguetié*), but we may hear *hándpick* as well as *hándpick*.

\(^1\) See 2. 1. 10—15.
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COMPONDS WITH LOCATIVE PARTICLES AS FIRST ELEMENTS

2. 39. 1. A description of the types of preparticle compounds is hardly amiss as the subject has been much neglected in handbooks of grammar. It is not discussed at all in Jespersen's Morphology¹ and receives only a scanty treatment in Koziol's book².

2. 39. 2. In all periods of the language there have been locative particles as first-words of compounds. In German, pronominal adverbs also are used with substantival compounds (Herkunft, Dasein, Darlehn, Hierbleiben). Unfortunately, this formative type is not mentioned in the latest book on German word-formation³. The corresponding English type has been weak. OE hidercume 'hithercome, arrival' is last quoted in 1440. A few other instances are here wunenge 1200, here-being 1377. In Shakespeare we find here-approach, here-remain, hence-departure, hence-going. In addition to these substantives we have a few MoE participles such as hence-meant, hence-got, hence-brought (only hence appears to occur) which are archaic or obsolete now. The locative particles are after, by (fore is no longer an independent word but a prefix), forth, in, off, on, out, over, through, under, up. They regularly precede substantives and adjectives, though not all with like frequency. With verbs, combinations are no longer freely possible. In OE, locative particles with verbs were what is often called 'separable prefixes', i.e. they were particles which preceded certain and followed other verb forms, according to rules of usage which are irrelevant to our subject. Suffice it to say that in OE the majority of particles formed no fixed combinations with verbs. The particles which regularly preceded a great many verbs in the way under does in understand are under, fore, and, in a lesser degree, over⁴. Other particles which had become inseparable prefixes with verbs but died out in early ME are gain (as in gainsay, gainstrive, gain-stand) and with (as in withdraw, withhold, withstand). OE purh, et, and ymb had in OE shown a tendency toward combination (cp. also 14th c. words like umthogh, umstrade 'bestrode', umsaged 'besieged', q. OED s.v. ymb-) which, however, died out, as locative particles came to be placed after the verb⁵. By the 15th c. the language had attained the stage where locative particles regularly followed the verb. This assumption is probably safe if we allow a certain amount of fluctuation. That the postpositional verbal type go out was pretty well established as far back as the 14th c. (see Curme 329) is proved by the existence of such agent nouns as comer about, maker up, finder up, looker on

² H. Koziol, Handbuch der englischen Wortbildung (Heidelberg 1937).
³ W. Henzen, Deutsche Wortbildung (Halle 1947, 2nd ed. Tubingen 1957).
⁴ T. P. Harrison, The Separable Prefixes in Anglo-Saxon (Baltimore diss. 1892).
which Langenfelt has traced to that century. On the other hand, prepositive usage must have lingered on considerably longer as the prefixal type outgrow is not attested before the second half of the 16th c. whereas, if postposition of the particle had been a fixed pattern in the 14th c., no inseparable verbal prefix out- could have arisen later. In point of fact, we find new formations with prepositive out- in a locative meaning as late as the 16th c., though we cannot now say whether they represent a more than literary type. For outbreathe ‘breathe out, exhales’ 1559 and outhold ‘hold out (as hold out one’s hand)’ 1512, OED has prose examples up to 1600 while in PE the verbs would be poetic only. Outcry ‘cry out, publicly’ does not seem to be recorded before the 15th c. (1430–40) and is last instanced for 1688.

2. 39. 3. Those particles which had not, by the 15th c., acquired the character of inseparable prefixes with verbs could no longer precede verb forms, except the nominal ones (verbal substantive and participles). Curme explains the rise of post-particle verbs from a tendency to give the particle more stress. If, as he says, “only moderately or weakly strest adverbs remained before it” (= the verb), it is difficult to understand the strong middle stress which particles have as first elements of compounds today. There were certainly other reasons which account for the new trend in word order with verbal combinations containing a particle.

Back and down are not originally locative particles, but form the same types of combinations and may therefore be included.

2. 39. 4. The following preparticle types are possible (reference to them in other places is made by number):

1) income (deverbal impersonal substantive),
2) onlooker (deverbal personal substantive),
3) onlooking (verbal substantive),
4) oncoming (first participle),
5) inborn (second participle),
6) outgrow (verb),
7) overanxious (adjective),
8) afternoon (prepositional combination used as substantive),
9) upstairs (prepositional combination used as subjunct),
10) an upstairs room (prep. combination used as preadject),
11) outhouse (substantive based on an adjunct/primary relation),
12) intoed (possessive adjective).

In types 1–7 the particle has adverbial force, in types 8–10 it functions as a preposition, in types 11–12 it is used as an adjective. With the exception of type intoed, which is Modern English only, all types go back to Old English (for type onlooker see below).

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1 G. Langenfelt, Select Studies in Colloquial English of the Late Middle Ages (Lund 1933).
2 Curme, op. cit. 324.
3 See 3. 1. 4–5.
2.39.5. Combinations of the type *income* are deverbal substantives with a verbal nexus determinant (*in-come*) and a zero determinatum. The zero morpheme may theoretically stand for anything connected with the signifié of the determinant. Practically, however, it expresses either the act or fact, more often the specific instance, the concrete result, the place, the agent (only the impersonal agent with preparticle compounds) of the action denoted by the underlying verb\(^1\). The idea of 'act' is expressed in *outset*, *outbreak*, *uptake*. The sense of 'specific instance' is contained in *backset* 'reverse', *backfall* (a wrestling term), *backlash* (machinery term), *downfall*, *downpour*, *downrush*, *outburst*, *outcry*, *uptown* 'change for the better'. The idea of 'agent' underlies *downfall* 'trap', *downhaul* 'rope' (naut. term), *income*, *outfit*, *outcome*, *upkeep*, *upstart*. Result-denoting are such words as *backwash*, *outlay*, *outturn*, *output*, *throughput* while the concept 'place' is expressed in *outlet*, *inlet*, *outfall*, *outrun*, *outcrop* (geological term).

Combinations such as a *forward lurch*, an *inward rush*, a *backward thrust*, where the first member is a suffixal derivation from a particle, do not belong here. They are regular adjunct/primary groups (deverbal substantives with a zero morpheme preceded by an adjective) with syntactic double stress, meaning 'act, fact, instance of -ing forward etc.'.

2.39.6. The type *onlooker* is similar to the type *income* in that again we have a predicate/subjunct verbal nexus as determinant, but it is different in that the determinatum is positively marked by the suffix -*er*. Thus an *onlooker* is 'an -*er* who looks on', from the standpoint of the signified. However, in the case of both *income* and *onlooker*, the analysis of the significate clashes with that of the significant, the constituent formal elements, which, by the principles of English word-formation, must be that of *onlooker* and *income*. Both types are what is called 'synthetic compounds'\(^2\). The type *onlooker* has replaced the Old English type *after-genga*. The earliest instances I have found are from the 14th century\(^3\): *fe after telleres* 1340 (Ayenbite 58, q. OED s.v. *after*), *aftercomer* (Wycl. Lev. XXII. 3, q. ibid.) 1382 which are obsolete now. Other Middle English coinages are *outrider*, *overseer*, *undertaker*. After *outrider* the word *outrider* (1598) was formed, both chiefly denoting attendants of a carriage. Other instances are *onsetter* 'inciter' 1549, as a mining term in the sense 'one who hangs on the corves upon the rope' 1789, *backslider* 'apostate' 1581, *onlooker* 1606, *outlier* 1610, *bystander* 1619, *underwriter* 1622, *outsettler* 1756, *downcomer* 'pipe conducting gas' 1896. Both the type *income* and *onlooker* have not formed any non-technical words for a long time past. In German, the corresponding types are exceedingly strong, but most words can be understood as derivations from verbal phrases: *Einkommen*, *Auskommen*, *Abkommen*, *Unterkommen*, *Abschrift*, *Aufschrift*, *Niederschrift*, *Unterschrift* etc. / *Abnehmer*, *Aufnehmer*, *Ansager*, *Auvereißer*, *Nachbeter*, *Zuträger* etc. In English, a similar connection has not developed or ceased to exist owing to the rise of post-particle verbs (come in) which, in turn, came to derive deverbal nouns. The

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1 See 4.1.9.  
2 Cf. 2.1.3—5.  
3 Combinations of the type *householder* (agent nouns based on a predicate / object relation) are somewhat older. Carr, *Nominal Compounds in Germanic* (London 1939, p. 229) has a few instances from the 9th century.
rival types of income and onlooker are blackout and looker-on. But whereas blackout combinations represent one of the most productive types of present-day English word-formation\(^1\) (cp. such recent coinages as playback, flashback), the type looker-on has not really developed. This may be due to the infixal character of the determinatum to which the English linguistic system is averse. As it is, both type onlooker and type looker-on are weak.

2. 39. 7. The meaning of combinations of the types 3—5 is self-evident. They are analysable as verbal substantive resp. participles determined by a locative particle. The most common words belonging to type 3 are perhaps oncoming, outgoing, wpbring, wpturn, inbreeding, also incoming, indwelling, inbeing, ingathering, those of type 4 bystanding, downfalling, forthcoming incoming, ingrowing, onlooking, oncoming, outstanding, outgoing, outlying, upstanding, while type 5 is represented by bygone, downcast, downfallen, downtrodden, inborn, inbred, ingrown, offcast, outcast, outbound, undersigned, uplifted, upswelt. For other coinages see the respective particles.

Type 6 applies only to the particles under, over, and out. Up has developed the character of a doubtful bookish preparticle. Type 7 applies to over only in present-day English.

Types 8—10 are structurally one type, the difference being a matter of function, viz., their uses as primaries, secondaries, or tertiaries. The type afternoon is the weakest of the three.

2. 39. 8. The type outhouse (11) applies to all particles except forth and on. However, not all particles have been equally productive in forming forestressed compounds. The strongest are after, by, out, over, under and up. The particles after, off, over, through, and under are also used as full adjectives and may thus enter into syntactic combinations such as in after years, an over copy, an off chance, the under side, a through ticket. The phenomenon is parallel to the coexistence of the forestressed compound type blackbird and the double stressed syntactic type black bird\(^2\). Only morphologically isolated types should be treated in word-formation which excludes the above mentioned syntactic groups. The type intoed (12) is weak and has coined words of essentially literary character only.

2. 39. 9. We have not yet approached the important question of the relevancy of preparticle combinations to word-formation. So far we have spoken of them as compounds, but we have not as yet proved their compound character. Koziol, whose book shows a general lack of critical attitude in matters of word-formation, treats preparticles as prefixes. Such a procedure, however, is not justifiable as particles are full words whereas prefixes are dependent morphemes. Not only are preparticle combinations not prefixal derivatives, but we have to ask ourselves whether they are compounds or syntactic groups. I have touched elsewhere upon the question of derivative relevancy with

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\(^1\) Cp. U. Lindelöf, English Verb-Adverb Groups Converted into Nouns (Helsinki 1937). The statistics made by Lindelöf would show an even greater increase of productivity if made today.

\(^2\) See below 2. 39. 8.
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guard to nominal compounds\textsuperscript{1}. The principle is the same with preparticle combinations: the criterion of relevancy of a type of word-formation is its isolation from a parallel syntactic construction. In the types \textit{income, onlooker}, and \textit{onlooking} (1—3), the particles function as subjuncts with regard to their second-words. The absence of syntactic groups of a similar structure and additional morphophonemic forestress settles the question of relevancy. Types \textit{oncoming} and \textit{inborn} (4—5) represent participles qualified by a subjunct of time or place. Syntactically, the subjunct cannot precede the participle, which establishes the morphological character of the types. Most combinations are only used attributively: \textit{outgoing mail, oncoming waves, outbound ship} etc. \textit{Forthcoming} is quite common as a predicative also: \textit{the book is forthcoming}. Some of those combinations which have become full adjectives, occur also in predicative position, as \textit{outstanding, downcast, downtrodden}, but others, as \textit{outbound, upstanding}, would hardly be so used. The verbal type \textit{outgrow} (6) looks like a common syntactic group ‘verb preceded by adverb’, as in \textit{he completely forgot him}. However, in all the existing verbal combinations, the particle has a meaning which it lacks as an independent subjunct. Moreover, the position of the particle is restricted to the place immediately before the verb whereas regular adverbs of degree (completely, excessively, entirely) may either precede or follow the verb (completely, entirely) or can only follow it (excessively, extremely). The semantic criterion of the type \textit{outgrow} also applies to the adjectival type \textit{overanxious} (7). \textit{Over}, in the sense of ‘excessively’, cannot be used in isolation, i.e. it is no independent word. The type \textit{upstairs} (9) is morphologically characterized by the absence of the article in situations where syntactic conditions would require it. Cp. \textit{up the hill, down the river with uphill, downriver}. The use of such words as preajuncts (type 10) is essentially a syntactic problem. On the other hand, there are many type 10 combinations which exist as preajuncts only: \textit{an overall picture, an underarm stroke, an after shave lotion} a.o. Full morphological isolation is established for combinations with a verbal basis. As there are no syntactic subjunct groups consisting of particle and deverbal substantive, combinations of the \textit{after shave lotion} type necessarily have morphologic standing. Whereas the use of subjuncts (\textit{upstairs}) as preajuncts (\textit{an upstairs room}) is a predominantly functional matter, the use of subjuncts as primaries is not, as it involves the addition of a new semantic element which is represented by a zero morpheme: \textit{afternoon = time of . . ., outlaw, outcaste = person who is . . ., overall = garment worn . . . etc.} Usually, these combinations are either not used as subjuncts at all (afternoon, outlaw, outcaste, overall, overdoor ‘picture, carving . . .’, overmantel ‘ornamental structure . . .’, undergraduate) or have a different sense from that of the subjunct (underground ‘the lower regions’). \textit{Outdoors} ‘the world . . .’ is perhaps nearest to the character of a mere quotation noun. Type \textit{outhouse} (11) is isolated from syntactic constructions by its morphophonemic forestress. The type \textit{introed} (12) is treated here for practical reasons only. Combinations of this type are not compounds but suffixal derivatives with the determinant \textit{in} + \textit{toe} and the determinatum -ed, comparable to combinations of the types \textit{hunchbacked} and \textit{palefaced}\textsuperscript{2}.

\textsuperscript{1} See 2. 1. 3—5. \hspace{1cm} \textsuperscript{2} See 2. 1. 5.
2.39.10. **Stress in preparticle compounds.** Being full words, particles have a heavy stress basically. But retention or reduction of this heavy stress is dictated partly by morphophonemic, partly by rhythmic causes. The only invariable stress patterns are those of the types *inclôme, onlooker, outhouse,* and *onlooking* (verbal substantive) which thus have morphophonemic value. The type *outhouse* is matched by a double stressed syntactic group type *over copy,* just as the nominal compound types *headache* and *blackbird* have syntactic counterparts in the types *stone wall* and *black bird.* Other combinations have the stress pattern heavy stress/middle stress in preadjunctal function while as predicatives they usually shift to the pattern middle stress/heavy stress. This applies to the types *oncoming* (4), *inborn* (5), *upstairs room* (10), and *intoed* (12). The shifting of stress is a normal rhythmic phenomenon in English with monomorphic as well as bimorphemic words or groups which in predicative position or in isolation have the basic or rhythmically reduced pattern middle stress/heavy stress (the Chińése ~ the Chińése language, *in-born ~ an in-born child,* well-mannered ~ a well-mannered gentleman). Type 5 has the same stress pattern. However, with the exception of full adjectives such as *outstanding, downtrodden, downcast,* and participial *forthcoming* which are also used as predicatives and then have the middle stress/heavy stress variant, we find combinations of the type only as preadjectives with the stress variant heavy stress/middle stress. Types 8—10 are coined as prepositional groups, so the main stress is expected to be on the noun while the basic heavy stress on the particle is, for rhythmic reasons, usually reduced to a middle stress. This is, indeed, the common pattern of type 9: *downstairs, upstairs, downtown, overseas* etc., though many combinations are more or less regularly subject to the influence of contrast and are therefore pronounced with forestress (*inboard, outboard, indors*). But used as preadjectives they usually shift their stress (*my upstairs room,* but also the *overseas edition*). Type 8 is unstable: we say *afternoon,* *undergraduate,* but *outlaw, inglâw,* *outcaste,* *óveralls* where the forestress is perhaps due to the analogy of other forestressed substantives. The type *outgrow* (6) is again best described as having two heavy stresses basically. However, the variant most frequently occurring is that of middle stress/heavy stress. The variant heavy stress/middle stress is used for rhythmic (*he overheard a conversation, to overthrow the government*) or contrastive reasons (*you are understating the difficulties*). Double stress is normal also for the type *overanxious* (7) which is perhaps chiefly due to emphasis.

2.40. **after—**

chiefly forms obs of type 10. It has temporal meaning in obs of the type *after-effect* 'later, subsequent . . .', the strongest of the group. Examples are *afterclap, aftercrop, aftercourse, aftergame, aftergrass, aftergrowth, aftergrief, afterglow, afterimage, aftermath, afterplay, afterpain, afterpiece 'farce', afterthought, afterwit* (arch.), *aftershock* etc. The nuance is sometimes that of 'immediately following', as in *after-birth.* The type is OE (*after-ylde* 'later age', *after-sang* a.o.), but of the obs in use today, *afterclap* 1420 is prob. the oldest.

1 See 2.2.4.
The particle has locative meaning in technical terms of the type afterbrain, as in after-body, after-breast, after-nose, after-wrist and nautical terms such as after-cabin, after-leech, after-sails, after-deck, after-yards, after-guard. The usual implication is 'posterior part of . . . ', in nautical terms 'situated toward the stern'.

In sense 'subordinate, inferior' the particle is no longer a living formative. We find it in obs. afterdeal 'disadvantage' (1481—1634) and OE after-ealo 'small beer'.

Type 1 is not represented, type 2 has formed afterliver 'survivor' and after-beer. Of type 3 there is the obs. word aftercoming 1382, of type 4 the likewise obs. ptc aftercoming for which the OED has two examples, one from 1594, another from 1598. Of type 5 we have afterborn OE and modern syntactic obs. such as after-described, -mentioned, -named, -specified which are not much used. For types 6 and 7 there are no coinages, while type 8 has formed afternoon 1450, obs. afterdinner 1576 and obs. aftersupper 1590 which are now obs of type 10. Of type 9 we have the obs. cb afterhand 1425 which seems to have been rare anyway. Type 12 has not formed any obs.

2.41. back-

is not a locative particle but a ME secretion from the syntactic group a-back 'at the back'. On the analogy of locative particles it has since ME, but chiefly from the 16th c. on, formed obs such as backfall, backlash, backset, backstitch, backwash (type 1), backslider (type 2), back-cast (type 5), backfriend, background, back-hand, back-log, back-stroke, backwater.

2.42. by-

goes back to OE, but none of the words now in use is older than ME. Type 1 has formed by-blow 1595 'bastard' and obs. by-slip 1612 'trivial fault; bastard'. Of type 2 we have obs such as by-stander, by-stroller, by-passer, of type 3 by-going (as in in the by-going), of type 4 occasional obs such as by-standing, by-peeping, of type 5 bygone 1424, by-past 1425 and occasional obs like by-flown, by-advanced. The other types have formed no coinages except type 11 which is very strong. From the OE period we have only by-word, by-law (which is partly a variant of byrlaw 'local law') and the obs. byspel, bispel 'parable' (last rec. from 1656 in NED).

In obs of the type by-pâtth the particle has the meaning 'running alongside of the main . . . , secondary, out of the way'. The sbs are concrete and chiefly denote place, as by-alley, by-route, by-lane, by-way, by-pass, by-road, by-walk, by-street, by-place, by-room, by-chamber, by-window, by-table, by-altar, by-office.

2.43. down-  

is, like back, not originally a locative particle, but an Early Middle English secretion from the group a dune ‘offhill’. It has formed such words as downcast, downfall 1300, downcom 1513, downhaul ‘rope’ 1669, downthrow 1615, downpour 1811, downrush 1855 (type 1), downlying 1526, downlooking 1823 (type 4), downbroden 1568, downfallen 1596, downcast 1602 (type 5), downstairs (8—10), downhill, downtown (9—10), 19th c. combinations of type 11 such as downdraft, downgrade, and the suffixal derivative downhearted 1774 (type 12).

2.44. forth-  

has always been a weak formative (see Harrison for OE). The only common word is probably participial forthcoming 1521 while the verbal nouns. forth-             going 1382, forthcoming 1533, and forthputting 1640 are of restricted currency. In Old English there were also deverbal substantives such as forgesceaf ‘future’, forgesipp ‘death’ and others, and adjectives such as forgesorn ‘eager to advance’ etc. of which no traces are left.

2.45. in-  

has formed a good many obs, but only a few of them belong to colloquial English. Many are only in technical use. Of type 1 we have infare OE, income, insight, inlet ME, indraught 1570 orig. ‘act of drawing in’, inset 1559, intake 1523, inturn 1599, inroad 1548 ‘a road (= riding) into a country’, input 1793, inburst, inrush, inbreak, inlook (all 19th c.). Type 2 has coined obs like incomer and indweller, type 3 such obs as incoming, inrunning, indwelling (ME), in-            being, ingathering (16th c.), inlying 1734, inbreeding 1842. Of type 4 there are indrawing 1598, incoming 1753, ingrowing, inlying, inrolling (19th c.). Type 5 has formed inborn OE, inbent, inbred (16th c.), ingrown, inwoven, inwrought (17th c.), indrawn 1751. Type 6: in- was a ‘separable prf’ with vbs in OE, but the influence of Latin in OE translation (see Harrison 22ff.) and app. also in ME (see em-, en-) often led to verbal obs. In em-, en- we have partly the element of the native particle (see prf em-, en-). Indrawal 1869, however, is no deverbal derivative, but coined after withdrawal. Type 7: the particle forms no adjs today, but in OE and ME it did with meaning ‘very, thoroughly’. Type 8 has formed inlaw (after outlaw), type 9 has coined indoor, inboard, while indoors belongs to type 10 (inboard is both 9 and 10). Of type 11 there are such combinations as inland OE, obs. invit ME, infield 1551, inwall ‘inner wall’ 1611, inmeats ‘entails’ 1616. The particle has the meaning ‘resident’ in in-patient, in-pensioner and a few others (see OED in adv. and a. 12), usually in opposition to out-combinations. Type 12 is represented by such words as inkneed 1724 and intoed 1824.

2.46. off-  

has formed such combinations as offspring OE, offal* = off-fall ME, offset 1555, offscum 1579 (rather than type 11 which has been unproductive with the particle), offcut 1663, offshoot 1674, offtake 1793, oflet 1838, offprint 1885, all type 1. Other types are represented by offscouring 1526, offreckoning 1687
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(types 3), offcast 1571 (type 5), off-color, off-peak (type 9), offhand, offshore (types 9, 10). Type 11 has not developed. Free syntactic groups (off chance, off grade etc.) are the rule with the particle.

2. 47. on-

is a weak formative. All PE combinations are modern, chiefly 19th century. We have such combinations as onset 1513, oncome, onrush, onflow, onlook, oncry (19th c.), all type 1. To other types belong onsetter ‘inciter’ 1549, onlooker 1606, onhanger 1848 (type 2), oncoming, ongoing (type 3, 19th c.), onlooking 1663, oncoming, oncarrying, onmarching, onrolling, onrunning, onrushing, all 19th c. (type 4). Onslaught 1625 translates early Dutch aenslag.

2. 48. 1. out-

has been a very productive formative. Examples are outcome, outcry, outlet, outlook ME, outset 1540, outbreak, outfall (of a river etc.), outburst, outgo 17th century, outlay 1795, outspread 1841, outthrust 1842, outstretch 1863, outpour 1864, outflow 1869, outrush 1872. Other 19th c. words, all with the basic meaning ‘result’, are outcrop, output, outthrow, outturn (type 1). Type 2 has produced such words as outrider, outgoer ME, outrunner 1598, outlier 1610, outsetter 1756, outkeeper (a surveying instrument) 1875. Type 3 is represented by outgoing and outcasting ME, type 4 by outstanding 1570, outgoing 1633, outlying 1663, type 5 by outcast 1374, outbound 1598. Of type 8 we find outlaw (translating L exlex) OE, outcaste 1876, of type 9 the 19th c. words outboard, outdoor, outdoor, while 1765, outboard 1827, outcollege 1861 are instances of preadjunctal combinations. Type 12 is represented by such uncommon derivatives as outlipped, outbellied, outeyed, outkneed, outshouldered. Types 11 (outhouse) and 6 (outgrow) have exceeded all others in productivity.

2. 48. 2. The meaning of the type outhouse is ‘... being, living, situated outside’. Examples are outdoor OE, outhouse ME, outbuilding, outcity, outdistrict, outport, outfield, outkitchen, outclerk, outpatient, outpost, outguard, outentry, outworld, ouparish a.o. The nuance ‘exterior, external, outer’ (as opposed to ‘inner’) underlies outline, outskirts, outbranch, outedge, outlimit, outsole, while the sense ‘leading out, outside’ is expressed in outstroke, outpath, outway, outrail, outwall a.o. In outside the implication is ‘unusual, not standard’.

2. 49. 1. over-

The type overcoat is the chief aspect of pre-particle type 11. The meaning is ‘outer, covering...’. Exs are chiefly MoE: overclothing 1425, overgarment 1485, overbody 1573, overclothes, overdress, overshoe, overskirt, oversleeve (all 19th c.). Technical terms are overleather 1408, overcloth, overglaze, overcoil, overhair, overbridge, overglass ‘glass placed over a mantepiece’, with meaning ‘second, overlying...’ or the like (all from the last three decades of the 19th c.).

2. 49. 2. The weaker variant of the preceding type is the type overlord where the pt has the figurative meaning ‘higher, superior...’. Exs are overking 1200 (a historical term now), overlord 1200, overman 1708 (now rivaled
partly by *foreman* in sense 'overseer', partly by *superman* 'Übermensch'), *oversoul* 1841 (a New England transcendentalist term). There have been occasional coinings such as *overchief, overchanter, overgod*.

2.49.3. The type *overtime* 'time beyond, exceeding the usual norm' has such MoE cbs as *overweight* 1552, *overgrowth* 1602, *overcharge* 1611, *oversize, overtime, overwork* (19th c.).

2.49.4. The type *over-caution* 'excessive, too great caution' is the emphatic counterpart of the preceding type. Like other cbs where emphasis is expressed (grass-green, untrue, non-smoker etc.) coinages of this type have double stress. Exs are *overlove* (OE, but ref. in 19th c.) *overcold, overhaste, overtentry* (ME), *overburden, overcare, overheat, overmeasure, overquantity* (16th c.), *overload, overproportion* (17th c.), *overcaution, overstrain, overzeal* (18th c.), *oversupply, overtoil, overuse* (19th c.). As the pt forms also adjs and vbs, there are many derived sbs which are thus doubly connected. Exs are *over-boldness, over-carefulness, overfrequency / over-exertion, over-exposure, over-indulgence, over-production, oversale*.

Despite its double stress, the pattern is morphologically isolated as a competitive forestressed type does not exist; in the sense 'excessive' *over* is no independent word and cannot be separated from its second-word or be placed in isolation.

2.49.5. Other meanings in substantival cbs than the ones described are not found in StE: *overword* 'repeated word, refrain' is Sc, *overtone* renders G *Oberton*.

2.49.6. The type *over-anxious* 'too, excessively anxious'. *Over* is the only pt in PE which forms underived adjs. The type goes back to OE from which about 30 cbs are recorded (acc. to OED). Most of the PE examples are MoE though many cbs have survived to the present day. Exs are *overcold, overfat, overfull, overgreedy, overhigh, overload, overproud, overrank* (OE), *overbusy, overcommon, overdear, overdesirous, overjeeble, overgreat, overhasty, overhot, overkine, overlong, overlow, overmuch, overnice, overold, oversharpe, overshort, overstrong, oversubtle, overswift, overwell* (ME), *over-curious, over-credulous, over-confident, over-due, over-delicate, over-gentle, over-individualistic* (16th c. and later). Cbs are practically ad libitum, and most of the adjs have derived sbs in -ness.

2.49.7. Exs of participial adjs are *over-agitated, over-assessed, overbred, overfurnished, overjoyed, overstrung, overworn, overwrought* etc. They are coined as synthetic cpds, i.e. regardless whether the second element occurs as an independent adj or not, parallel to such cbs as *well-dressed, undressed, under-dressed*.

The degree of cohesion with cbs of this type is looser than with other cbs in that they admit of separation in cases of contrast: *many under-developed countries are over, not under, advised* (The Economist, 1952, Jan. 19, p. 150).

The second element is a first ptc in such cbs as *over-abounding, over-exciting, over-depressing, over-dazzling, over-inviting*.
2.49.8. Possessive adjs (type 12) are oversized (cbs of this type are formed as synthetic cpds, see 2.1.5), overhanded, over-parted, over-housed, oversparred, and more occasional cbs such as over-brained, over-leisured, overtimbered. This group is less common while participial cbs are possible ad libitum.

2.49.9. Other types have been less productive. Type 1 has chiefly formed technical terms, most of them coined in the 19th c. Exs are *oversight* 13., *overfall*, *overflow*, *overlay*, *overcut*, *overlook*, *overspill*, *overhaul*, *overlap*, *overshade*, *overthrust*, *overwash*, *overprint*, *overpass*, *overrun*, *overdraught*. Type 5 has *overshot* (wheel), type 8 *overnight* ‘preceding night’ (now chiefly AE), *overall(s)*, *overdoor*, type 9 has *overage*, *overland*, *oversea*, *overnight*. Cbs of type 10 are *overknee*, *overbank*, *overside*, *oversea*, *overseas*, *overland*, *overarm*, *overhand*, *overhead*, *overleaf*.

*Over* is the only pt that has formed verbal cbs based on a prepositional relation. *Overwinter* get over the winter, winter’ is rec. as far back as OE, but seems to have died out subsequently. The first modern quotation in OED is from 1895. There is also an obs. *overyear* (1574—1615).

2.49.10. Cbs of the type *over-anxious* cbs have double stress. It must therefore be asked whether *over* is not an independent word and the cb a syntactic group as the OED (s.v. *over* 28) asserts. As evidence it adduces the possibility of such a phrase as *over and above particular* which is, however, hardly StE now. *Over* is not a real adverb (though in some northern B dialects it has this character, being the regular word for ‘too’, see OED *over* adv. 12). We could not use it as a synonym of excessively, nor could we repeat it as we can *too* or *very*. An isolated position (as in *Is he careful? Very*) is impossible with *over*. The type *over-anxious* may therefore be considered a word-formation type, despite its double stress.

2.50. *through-*

continue OE *purh* or rather its later variant *puruh*, *through* representing *purah* while *thorough* goes back to *purah*. Both forms were used promiscuously till the 18th c. (see Jesp. MEG I. 5. 41) which accounts for the overlapping of the two forms in the same functions and also for the frequent use of either form in one and the same cb. But as *thorough* is now an adjective to all intents and purposes, combinations with it cannot be regarded as preparticle compounds in synchronic terms. Older coinings have been listed here for historical reasons.

The OE particle *purh* was to a certain extent an inseparable prefix with *vbs* (*purh*faran, *-un Ian* etc.), but those verbal cbs did not survive into ME. The few cbs we have today are back-derivations, as *thoroughbind* ‘bind a wall by a stone which goes through’ 1884, *thoroughdrain* ‘drain a field by waterthoroughs’.

Of type 1 we have *thoroughfare* 1386, orig. with meaning ‘passage’, *throughput* 1922 which was coined after *output*, the plantname *thoroughwax* 1548 (after which was coined *thoroughwort* 1828).

In cbs of type 7 the particle was in OE common with meaning ‘entirely, thoroughly’, *purhwacol* ‘thoroughly awake’, *purh-hëlìq* ‘very holy’. With adjs the type counts a few antiquated words, as *through-ripe*, *through-old*, *through-ho.*
Whereas obs of the preceding types are chiefly technical terms, type 11 has formed both technical terms and words that are used by a wider public. In obs of this type the particle has the meaning 'going through'. Examples are *through-passage* 1566, *through-toll* 1567, *thoroughbass* 'figured bass extending through a piece of music' 1662, the 19th c. technical terms *thoroughband*, *throughband*, *thoroughdraft*, *throughdraft*, *throughstone*, *throughjoint*, *throughbolt*.

Recent coinages all have the form through, as the traffic and travelling terms *through journey*, *through passenger*, *through ticket*, *through carriage*, *through train*, *through traffic* a.o. These obs have double stress, i.e. they are not cpds, but syntactic groups consisting of adj plus sb. Recent *thráway*, however, is a compound.

### 2.51.1. under-

With the meaning 'insufficiency' *under* forms possessive adjs of type 12, as *underhanded*, *undertoned*, *underhorsed*, *undermasted*, *underofficered*, *understaffed*, *understocked*, *underwitted*, *undersized*, *undersparred* (naut. term), *undermanned*, *underlimbed*.

Type 7, i.e. obs with underived adjs, has not, however, developed. There are a few rare words such as *under-ripe*, *underscrupulous*, *underhonest* (as opp. to *overproud* in Sh), but this is as far as the type goes. Latin has the corresponding type (see prf *sub-* for its imitations in English), but both French and German have developed overstatement types only (*überklug* resp. *surfín*).

### 2.51.2. Strongly developed are combinations of type 11. The shades of meaning the particle conveys are illustrated by the types *underwood* 'lower part of the wood', *undercurrent* 'underground current', *undergarment* 'garment worn beneath another', *underking* 'inferior king'. Examples of the type *underwood* are *underwood* 1325 which attracted *undergrowth* 1600 and, with a redundant particle, *underbrush* 1813, *underbush* 1891, *underscrub* 1894, *undershap* 'lower jaw' 1607, *underbody* 1621, *undercarriage* 1794, *underframe* 1855, *underleaf* 1873. More often, the conceptual basis is that underlying the type *undercurrent* 'second, but underneath ...'. The oldest recorded instance of the type appears to be *undercroft* 'subterranean vault' 1395. Others are Modern English, as *underlip*, *underworld* and technical terms such as *undercliff*, *underboard*, *underdeck*, *underlayer*, *understratum*, *underdrift*, *underdrain*, *undertone*.

Current nouns denoting articles of clothing are *underclothing*, *underclothes*, *underwear*, *undergarment*, *underlining*, *undershirt*. Others may be formed ad hoc.

### 2.51.3. The particle is used with substantives designating holders of official positions, though chiefly in combinations of older date, such as *underking* OE, *understeward*, *undertreasurer* ME, *undersecretary* 1687. Many more words are listed in dictionaries without, however, forming part of the common vocabulary. Combinations with *assistant* and *sub-* are more in vogue. *Assistant* is much more democratic than *under*, so in other than the old established terms we speak of *assistant treasurers*, *assistant secretaries*, *assistant clerks*, while in other cases usage prefers *sub-* (which is more technical and therefore free from any social tinge of subordinateness), as in *subtenant*, *subagent*. *Underdog* 1887 is socially tainted: originally denoting a losing dog in a fight, it is now exclusively used for a human victim of social injustice.
II. Compounding

2. 51. 4. Other types are represented by such words as undercut, underlay, underpass, understudy (type 1). The last word is wrongly described by OED as a derivative from the vb understudy. Quite the reverse, for it is the noun which is the basis. This is indicated by the forestress on the verb (to understudy). Formed as a verb, understudy could only mean ‘study less than’ (see above), which disposes of the OED explanation from the point of view of the significate also. Type 2 has formed such words as undertaker, underwriter, and undercut (a woodcutting term). Examples of type 5 are underhung, underslung, under-mentioned, undernamed, undersigned, undershot, examples of type 8 undergraduate and underground (in various old and recent meanings). Types 9 and 10 are instanced by underfoot, underage, underhand, underground, undersea, while underarm, underproof, underdip (mining term), underglaze (colors = pottery term) represent type 10.

2. 52. up-

in OE had no tendency toward verbal combination (according to Harrison). However, the existence of PE upspring, orig. ‘grow’ (of plants) and upbraid, orig. ‘fling up (an accusation)’, both going back to OE, seem to point out that there were at least feeble attempts at verbal combination. The further development also testifies to the particle having established a pre-particle type with vbs before the decisive 15th c.; but it must be admitted that many of the ME verbal cs occurr in poetry only, and all these vbs suggest translations from Latin vbs: upbregdan is almost exactly L supponere used with the same meaning of ‘assume, make an assumption’, uphold corresponds to sustinere, upturn to subvertere, upspring to subcrescere. L sub as a verbal prf frequently conveys the meaning ‘up’, i.e. ‘upward movement’ as in subvolo ‘carry up’, subvolo ‘fly up’, subvolo ‘roll upward’ etc. On the other hand, OE up very often translated L ex-, e- when the meaning of the Latin vbs admitted of it, or was used as a translational element with simple Latin vbs which connoted the idea ‘up’. In Harrison we find that up dôn renders elevare, levara, tollere; up gân translates orior (said of the sun), up hebban stands for levare, elevare, exaltare, efferre, extollere; up weallan renders ebullire, while up rëvan is the equivalent of erigere. It seems to me that the ME vbs were likewise translations of Latin vbs: upraise ‘extol’ is prob. L extollere, uplift would render elevare; upheave would render elevare and extollere; uprear would stand for elevare and erigere. Upset 1440 had for about two centuries only the meaning ‘set up, establish’ which would render L erigere. Even the comparatively recent vb uproot 1620 looks like a translation of L eradicare, but it may also be a prefix formation from vb root ‘exterminate’. The vb first occurs in the sec. ptc form uprooted (1593) from which the full vb might be a backderivation. Upend 1823 ‘turn the end upwards’ is derived from the phrase ‘up end’, and upanchor 1894 was coined after the same pattern. There have been many other verbal cs since the ME period, as upbear, upblow, upfill, uproll etc. etc.; but they occur in poetry only and are not really common property of the language. They are cpds for the eye only, adapting for poetry what in reality is the vb followed by the respective particle in prose. Probably the only vbs that have general currency are uphold, upturn, uproot, upset. Upset in meaning ‘overturn’ is
Compounds With Locative Particles As First Elements

recorded from about 1800, evidently under the influence of upturn and uproot with which it now forms a semantic group. It is needless to add that participial adjs are not derived from vbs, but represent type 5 cbs in their own right.

Less strongly developed is type 11, represented by the types upside ‘upper side’ and uproad ‘road going upward’. Both types existed in OE, but no cbs survived into the ME period. Of the type upside there are only a few cbs, the title word, rec. from 1611, and upland 1566 (as opposed to the lower parts of a country). The type uproad is represented by upshot 1531, orig. ‘final shot in a match at archery’, now signifying ‘final issue’. All other cbs are 19th c. or later, as upstroke, upgrade, uproad, wpshaf, upwave, uprush, upbow.

Of other types there are upspring OE, uprise ME, upstart 1555, but chiefly 19th c. words such as upbeat, uplif, upthrow, upthrust, uptake, upkeep, upbreak, upburst a.o. (type 1), upbuilder, upclimber, upshutter, upstander, all 19th c. technical terms of type 2 (in Scotch there are older formations, see OED); upbringing, upbubbling, upgushing, upswwelling, upsurging a.o. (type 3); upstanding OE, and MoE cbs such as upscreeping, upflashing, upstriving a.o., but these participial cbs of type 4 have never been common.

The second ptc type 5 has been much more productive and current, though chiefly in poetry. Examples are upset ME, upcast LME, upturned 1592, uplifted, upturned, uprolled, upswept, upblown a.o.

Cbs on a prepositional basis are upcountry (types 8—10) 1810, uphill (8—10) 1548, upriver (9, 10) 1836, upstairs (8—10) 1596, upstream (9, 10) 1681, uptown (9, 10) 1838, upstage (9, 10), upwind (after upstream) ‘against the wind’ (9) 1838.

Uproar 1526 is fr. Du oproer ‘confusion’.
PHRASES

2.53.1. Types man in the street / bread and butter / black market / hanger-on

In order to create a new lexical unit, language does not necessarily follow a pattern that is morphologically isolated. Any syntactic group may have a meaning that is not the mere additive result of the constituents. There are all degrees of semantic difference from a casual syntactic group (black pencil) to a syntactic group with a special meaning (black market: grammatical relation receding before lexicalization) to broken sign groups like get up consisting of distributionally independent speech units. The type black pencil would have no place at all in word-formation as it is a normal syntactical group, the type get up would not either as it is composed of pseudo-signs. We have excluded unmotivated groups from word-formation. The extreme cases are always easy to decide; it is those in between that offer difficulties.

We have thought fit to treat in word-formation combinations like black market where motivation is still obvious, whereas we have not included syntactic lexicalized groups in which synchronic analysis cannot discover any trace of motivation. The degree of motivation or non-motivation, however, is not always easily established, and borderline cases abound. It is with the express reservation that there are all degrees of motivation in lexical phrases that we have treated them in this marginal chapter of a book on word-formation. While man in the street is fully motivated, man-of-war is only motivated with regard to war, master-at-arms appears motivated to a limited number of speakers only. Mother-of-pearl and mother-of-thyme are as motivated as butterfly, i.e. by poetic comparison. We shall first give examples of nominal phrases.

Especially frequent are prepositional groups. Most obs show the stress pattern of a syntactic group, i.e. the members have full stress. The stress indications of grammars and dictionaries vary insofar as the first members are often marked with lesser stress than the last member. This is very often the practice of the OED (followed by Webster) which is inclined to mark the stress as in fellow soldier, dog-in-the-manger. This obviously corresponds to an individual tendency and is not borne out by general usage. It is not denied that the first members are often heard with lesser stress, but this is a general phenomenon with syntactic obs. The same variants occur with good friend, pretty girl, but the basic stress is not affected thereby.

2.53.2. Type man in the street: man about town, man of the world, master of ceremonies, maid of honor, matron of honor, lady in waiting, tenant at will, bag of bones, dog-in-the-manger, hog in armor, ticket of leave BE (= parole AE), sleight of hand, mother-of-pearl.

Some combinations have unity stress, either on the first member as the -in-law words (father-in-law, son-in-law etc.), stock-in-trade, the exocentric phrases good-for-nothing, four-in-hand and others, or on some other member, as cat-o’-mountain, cat-o’-nine-tails.

2.53.3. The process of lexicalization is obvious in changes in the significant with those words also that are not characterized by unity stress. There is hesitation as to the place of the grammatical morphemes. The plural -s is often attached to the whole combination instead of to the determinatum (see Jesp. MEG II. 2.53–57 and VI. 8. 83). This tendency is old. I will quote here the Quarto and Folio variants of King Lear IV. 6. 190 for sons-in-law: sonne in lawes (Q 1), sonnes in law (Q 2, Q 3), Son in Lawes (F 1), Sonnes in Lawes (F 2), Sons in Laws (F 3), Sons-in-Laws (F 4). The plural of good-for-nothing is good-for-nothings, not because “goods-for-nothing would suggest a wrong idea” (Jesp. VI. 17. 8 note) but because good is not the determinatum. The phrase is an exocentric combination.

2.53.4. Another phrase pattern is the type bread and butter. Exs are brandy-and-soda, bubble-and-squawk ‘meat and cabbage fried up together’, carriage and pair, chaise and four, coach and six, cup and saucer, drum-and-fife, knife and fork (plant name etc.), lords and ladies (plant name), milk-and-water, pepper-and-salt (kind of cloth), whisky-and-soda a.o.

The plurals, when they do occur, have no fixed pattern: we say bread-and-butter, but cups-and-saucers.

There are also adjs of the type, but they are few in number. Exs are deaf-and-dumb, tried-and-true, rough-and-ready, hard and fast, cut and dried.

Numerals like five and twenty, hundred and twenty etc. show the same syntetic formation.

2.53.5. Various other types are illustrated by blāck mārkēt (cp. blackbird), great aunt, common sense, free trade, free wheel, stained glass, magic lantern / jōlding dōr (cp. dāncing-gir], jailing evil, Flying Dutchman, flying fish / bést sēller (cp. nēwcomer), best man.

2.53.6. A derivative from a postparticle verbal phrase (verb followed by a locative particle, see 2.58) is the type hāngēr-on. As the plural morpheme is not attached to the whole combination (cp. rúnaboðs as against hāngers-ôn), this type of phrase cannot be considered a compound. It is established by the Late Middle English period. Exs of this not very productive pattern are looker-on, passēr-by, listener-in, whipper-in, runner-up, diner-out, caller-out ‘one who announces the changes in steps in a dance’ 1882 DA, cuttear-out ‘one who cuts out cattle from a herd’ (western AE) 1910 DA, puller-in ‘one who tries to induce passers-by to come into a store’ (A slang) 1895 DA, snapper-back ‘in American football, the player who pushes the ball in play’ 1887 DA.

2.54. Types has-been / I.O.U (sentence phrases)

are such units as contain a finite verb. Cbs of this kind are not numerous in English and have no fixed pattern. Exs are has-been, might-have-been, never-was, the plant name love-lies-(a)-bleeding ‘amaranthus caudatus’, I. O. U. fr. I owe you. The first three exs. have forestress, the fourth has two stresses, the last has endstress or double stress.

6 Marchand, The categories
2.55.1. Types king-emperor / queen mother / prince-consort (copulative combinations)

Coordinative combinations do not usually enter the forestressed compound type (see 2.1.17), but are treated as syntactic groups. The additive type king-emperor is used to denote persons who are two (or sometimes more) things at the same time. Shakespeare has such coinages as giant-dwarf, king-cardinal, uncle-father, and in other writers of the early 17th century we find combinations like king-God and queen-bride. However, the type gains currency in the 19th century only. Coinages have a literary character, as queen-empress, cherub-patriarch, clergyman-poet, king-bishop, king-poet, king-pedagogue. Present usage tends to restrict the pattern to combinations denoting one who combines two professional or quasi-professional capacities, as in historian-biographer, actor-director, actor-manager, author-producer, pianist-composer, composer-director, composer-conductor.

Recently, the jargon of commerce has utilized the type in such coinages as secretary-stenographer, secretary-treasurer, producer-distributor, contractor-builder. We also find journalesse combinations of more than two members: actor-producer-director, even soldier-statesman-author-orator (used in an editorial summing up of an article on Caesar by Robert Graves, The New York Times Magazine, March 10, 1957, p. 17).

2.55.2. There are other cbs in which the second-word is notionally dominant while the first-word is its apposition. Exs of this type are queen mother, merchant-tailor, gentleman-commoner, gentleman-farmer, gentleman-usher, the archaic words merchant-adventurer and merchant-venturer, such cbs as sword-cane, desk-table a.o.

The reader may sometimes find that one or the other instance may be interpreted either way. Transitions are, as everywhere, fluctuating. Is OE werwolf an additive or an appositional cpd? A queen mother is 'a mother who is at the same time a (one-time) queen', a queen bee is 'the bee which is the queen of the hive'. Kluge's explanation for appositional cpds "im allgemeinen erhält das 1. Wortglied durch das 2. Glied eine appositionelle Verdeutlichung" (§ 93) is misleading. It is quite contrary to the character of compounding that the first-word should be the main part and also against the linguistic principle (in Germanic languages) that the determinant precedes the determinatum.

2.55.3. Though the two members are notionally coordinated, there is a marked difference of importance between them, as is seen in prince-elector, prince-bishop, prince-consort, prince-regent, still more in earl-marshal (which originally was marshal only). The bearer of the respective title is an elector, bishop, consort, regent, marshal who is a prince (earl) at the same time. In lieutenan-colonel, lieutenant-commander, lieutenant-general, lieutenant-governor, obs. lieutenant-capitain we have appositional cbs with the first-word having kind of prefixal value, comparable to vice-. Holder of such titles are no longer felt to be 'lieutenants', though this was the origin of the titles. They always take the group -s in the plural.
2.56. Types write down / come in (verbal phrases)

With verbal phrases we observe the same state of affairs as with nominal groups. There are fully motivated combinations such as write down, come in, go out at one end of the line, and wholly unmotivated groups of pseudo-signs such as get up, give up, carry out (a plan), at the other end. Particles may develop a class meaning in combination which they do not have as independent words. Thus, up conveys the perfective or intensifying meaning ‘to the end, completely’ to verbs where the idea of a final aim or result is implied, as in eat up, drink up, fill up, finish up, clear up, beat up, break up, tear up. Many motivated phrases are entirely degrammaticalized (lexicalized), i.e. any modification can only apply to the whole combination while the constituents are no longer susceptible of characterization. Cut short, take to pieces, bring to light, take into consideration, give the sack belong here. Others are less lexicalized in that their elements still admit of grammatical modification. Such phrases as take care, take notice, pay attention fall under this group: great care should be taken, he was not taken any notice of, no attention at all was paid illustrate this point.
III. PREFIXATION

The term ‘prefix’

3.1.1. The definition of the word ‘prefix’ seems to meet with difficulties. The older grammarians (Hermann Paul, Mätzner, Wilmans) do not know (or, as Wilmans, do not consider) the term; they treat prefixing as part of compounding. Kluge (Abriß der deutschen Wortbildungslehre) introduces the term on account of the importance of these particles though prefixing “gehört eigentlich in die Lehre von der Wortbildung durch Zusammensetzung” (71). The word is now firmly rooted, in linguistic terminology, but it is used in various meanings. The OED uses the word for almost any prepositive particle, but employs the term combining form for various pre-particles without giving a definition of either. Jespersen gives no definition whatsoever, while Koziol, in his introduction, restricts the use of the word prefix to particles which have no independent existence as words, but in his treatment he classes locative particles also among the prefixes. On the other hand, many prefixes are missing in his book. Kruisinga gives the prefixes only a few pages in his Handbook, saying that a prf “really has the same function as a word used as the first element of a compound” (1596). This standpoint is hardly acceptable. A dependent morpheme cannot be treated on the same footing with an independent word.

Prefixes of native and foreign origin

3.1.2. We call prefixes such particles as can be prefixed to full words but are themselves not words with an independent existence. Native prfs have developed out of independent words. Their number is small: a-, be-, un- (negative and reversative), fore-, mid- and (partly) mis-. Prefixes of foreign origin came into the language ready made, so to speak. They are due to syntagmatic loans from other languages: when a number of analysable foreign words of the same structure had been introduced into the language, the pattern could be extended to new formations i.e. the prf then became a derivative morpheme. Some prfs have secondarily developed uses as independent words, as counter, sub, arch which does not invalidate the principle that primarily they were particles with no independent existence. The same phenomenon occurs with suffixes also.

III. Prefixation

Changes brought about by the Norman Conquest

3.1.3. The system of English word-formation was entirely upset by the Norman Conquest. This does not mean that the present system is due to the Normans, but the Normans paved the way for the non-Germanic trend the language has since taken. It is due to the continuous contact with France that English borrowed so many words from French which, as a matter of course, occasioned the rise of prfs and sfs out of these loans. And it is due to this Romanization, through French, of the English vocabulary that Latin words could so easily be adopted. The language took to wholesale borrowing, a method which meant an enormous cut-down on the traditional patterns of wf out of native material. For words which are prefix or suffix formations in German we have loans in English: Befestigung|fortification; Verteidigung|defense; Betrachtung|consideration, contemplation; Unternehmung|enterprise; Angriff|attack; Enttäuschung|disappointment; Entstehung|origin etc. etc. We cannot explain everything through Romance or Latin influence. Surely there are other elements which have played a role, and we are far from being able to solve this problem entirely by pointing out one or two auxiliary elements. Some of the old prfs disappeared because they were practically too weak phonetically, as æt-, ed-, of-, ymb-. The prf for- had lost its sign character by the ME period. It is suggested that homophony with fore- may have played a part. As early as ME, the connection between prf and simple vb was lost in forget, forgive, forbid, forsake (OE sacan ‘strive, contend’ had died out) and no common nuance of meaning united forgo, forswear, forspend. The intensive meaning was perhaps felt in forgather, forbear (still dialectal with meaning ‘endure’). The final result was that English lost a prefical device for expressing the idea of intensity, perfectivity with vbs. This function is now performed by postpositive particles, chiefly up and out (finish up, use up, burn out). English has no prefical equivalents for G er-, ver-, zer-. What Koziol (259) means by saying that “als Konkurrent (of separative to-) trat seit me. Zeit auch die lat. franz. Vorsilbe dis- auf” is unintelligible. The prf dis- never stands for G zer-.

The development of post-particle verbs

3.1.4. An important factor which stopped the development of prfs out of native material was the tendency to form post-particle vbs. This development is achieved by the 14th c. All locative particles with vbs were more and more frequently placed after the verbs, except those which were frequently used with a non-locative meaning in combination with verbs and therefore became established as inseparable verbal prefixes. As far back as OE, fore, over, and under had developed prefixal character. But this development affects verbal prefixes only. It helps explain, for instance, why such types as G hintertreiben, umzingeln, durchdringen, widerstehen could not develop from ME onwards. Curme\(^1\) explains the rise of post-particle verbs from a tendency to give the particle more stress. To judge by the results now long reached, I think that

\(^1\) The Development of Verbal Compounds in Germanic. Paul and Braune’s Beiträge 39 (1914) 320ff.
the rise of the type is tied up with the normalizing of the position of locative subjuncts in general: he went out (in, under etc.) is parallel to he went out of the room, he went home, he went there etc. Adverbs of indefinite time (never, often etc.), of manner (quietly, slowly etc.), of degree (almost, entirely etc.), of modality (hardly, certainly etc.) may immediately precede the vb, but adverbs of place always follow the vb (except for such sentences as I here give a few examples where the locative sense of the pronominal adverb is considerably weakened).

Prefixing on a Neo-Latin basis of coining

3.1.5. There are many prfs, chiefly used in learned words or in scientific terminology, which have come into the language through borrowing from Modern Latin, as ante-, extra-, intra- / meta-, para- etc. The practice of word coining with these particles begins in the 16th c., but really develops with the progress of modern science only, i.e. in the 18th and esp. the 19th c. The patterns of coining are NL (though some of the types are already OGr or AL). With these particles there is a practical difficulty. They may represent 1) such elements as are prefixes (in the above meaning) in Latin or Greek, as a- (acaudal etc.), semi- (semi-annual), 2) such elements as exist as prepositions or particles with an independent word existence, as intra, circum / hyper, para, 3) such as are the stems of full words in Latin or Greek, as multi-, omni- / astro-, hydro-. This last group is usually termed 'combining forms' (OED, Webster). In principle, the three groups are on the same footing from the point of view of English wf, as they represent loan elements in English with no independent existence as words. That macro-, micro- a.o. should be termed combining forms while hyper-, hypro-, intro-, intra- a.o. are called prefixes by the OED, is by no means justified.

3.1.6. Only such pts as are prefixed to full English words of general, learned, scientific or technical character can be termed prefixes. Hyper- in hypersensitive is a prefix, but hyper- in hypertrophy is not, as -trophy is no word. We cannot, however, undertake to deal with all the prepositive elements occurring in English. Such elements as astro-, electro-, galato-, hepato-, oscheo- and countless others which are used in scientific or technical terminology have not been treated in this book. They offer a purely dictionary interest in any case. In the main, only those pts have been considered that fall under the above groups 1) and 2). But we have also included a few prefixes which lie outside this scope, as prfs denoting number (poly-, multi-), the pronominal stem auto- which is used with many words of general character, and pts which are type-forming with English words of wider currency (as crypto-, neo-, pseudo-).

3.1.7. There is much confusion in the matter of wf by means of the combining forms. The OED, by using the term, avoids the discussion of their exact relation to English wf and does not properly distinguish between these forms used as prfs with English words and their use in what we might call coining on a NL basis of coining (cp. e.g. sub-, super- in OED). Koziol and Jespersen speak of prefix formations with cbs like hypergamy, polygamy, polygyny, pantology, pantoScope. The distinction I make is not pedantry. It is of prime
importance in the defining of the stress patterns. The combining form used as a prefix involves stress variations between ‘full stress/middle stress’ and ‘middle stress/full stress’, as in multicycle and multispécialist, but the place of the stress is invariably on the same syllable. Stress shifting, as in multiparous, multisónous, pantológy, polýgeny etc. shows that the respective cbs were coined not as English prefix formations but as NL cpds. On the other hand, the fact that a certain cb fits into a formative stress pattern does not prove the word a coinage on a native basis: multisect is NL multisectum, multíflorous is LL multíflorus, no *sect (in the sense required) or *florous exist as words in English.

I have not dealt with compounding on a NL basis of coinage as it would have involved the discussion of the patterns of Latin and Greek wf, a subject far beyond the scope of this book.

3.1.8. In the same degree as the second-word is felt to be an independent (though learned or scientific) word, the whole originally Latin-coined cb tends to become analysable as a coinage on a native basis. The effects of such re-interpretation on the stress pattern have already been pointed out. Semantically, this actualization is expressed by the extension of foreign types to common English word material. If we take, for instance, the pt post-, we see that it originally coins words only on a Latin basis, formally as well as notionally (post-classical, post-diluvian). But as the second-words existed independently, the cbs were no longer analyzed on a Latin, but on an English basis, and the type postwar years is the result of the new analysis. Similar is the case of extended bahuvrhi adjs, as multi-angular ‘having many angles’ which led to the type multi-bladed.

3.1.9. The actualization of a Latin-coined cpd is impossible, we have seen, when the second element is no English word. Actualization is therefore excluded with cbs whose second parts are not words in Latin or Greek either, as with the following terminal elements which occur as elements of Latin or Greek cpds only, never alone: -fluous, -fic, -ferous, -gerous, -loquous / -phagous, -philous, -phorous / -cephalous, -gy nous, -gnathous, -logous, -merous, -phyllous, -stomatous etc. (direct from NL), or -gamy, -geny, -logy, -stomy, -t rophy etc. (taken from French). Such elements have no chance of becoming words in English, and with the exception of trisyllabic constituents, (as tri-céphalous) have no stress. The stress is always on the syllable preceding them.

3.1.10. As my method is primarily synchronic, I have considered as English coinages such words also as are adaptations of foreign words provided they have been actualized (reinterpreted) in English. That subprior, transfluvial, multidentate by origin represent L subprior, transfluvialis, multidentátus may be of historical interest; but what matters linguistically is that these words are analysed as English coinings by the present-day speaker. On the other hand, such words as digonous, dimerous, dipérous (repr. NL words in -us) whose second elements do not exist as words in English, have remained outside a formative pattern which is shown by the pronunciation [di] and the stress on the first syllable (as compared with regularly stressed dicóccus, dipólar). Partly actualized are e.g. multivalent and polyvalent. They are now chiefly
accented as multivalent, polyvalent, the second element being associated with valence, valency. In other cases, there can be no actualization for obvious reasons: multivocal has no connection with vocal, but is coined after equivocal, univocal; monotonous is connected with monotony, but that the second element is ultimately that which we have in tone has not become a linguistic reality.

3. 1. 11. Most prefixes are combined with English words without any formal changes. An exception is made by prfs of Greek origin and negative in- which is Latin. In accordance with the linguistic laws of Greek, a-, anti- (in scientific nomenclature), epi-, macro-, micro-, meta-, para-, proto-, syn- undergo changes in certain positions which are indicated under the respective prfs. But on the other hand we observe that the naturalization of a foreign type brings about parallel phonetic changes. The phonetic changes a prefix undergoes according to the linguistic laws of the language from which it was taken tend to be disregarded when the type has become a native pattern and is analysed as a cb of two English words. The before-mentioned particles of Greek origin very often show a tendency to keep their full form, regardless of a following vowel. Regularly we expect antalgic, antemetic, aut-erotism, prot-organism, mono-acid, but antiallergic, antipoplectic, auto-erotism, proto-organism, monoacid (besides monacid) represent the now stronger tendency. For more instances see the respective prefixes.

3. 1. 12. While there is little wff with formal changes, it is noteworthy that most of the prfs of Latin and Greek origin have a pronounced learned, scientific or technical character and are, in consequence, used with learned words of Latin or Greek origin only. Chemical terms are often fabricated words and are NL insofar as they are composed of elements found in Modern Latin, though they may be loans in the latter (as alcohol, benzoe). To these also, prfs of Latin and Greek origin are attached, as will be seen under the respective prfs and sfs. Here I will point out only such words as parabenzene and paraaldehyde.

Competition between prefixes

3. 1. 13. There is often competition between prfs as there is between sfs and independent words: over- and out- sometimes overlap, there is overlapping between un- (neg.) and in-, un- (reversative), dis- and de-, between ante- and pre-, super- and hyper-, super- and trans-, super- and supra-.

The conceptual relations underlying prefixed words

3. 1. 14. A pre-particle or prefix combination may be based on three different conceptual patterns and accordingly present the prefix in three functional aspects: 1) the prefix has adjectival force (with sbs, as in anteroom, archbishop, co-hostess, ex-king); 2) the prefix has adverbial force (with adjectives and verbs, as in unconscious, hypersensitive, informal, overanxious | unroll, rewrite, mislay); 3) the prefix has prepositional force (as in prewar years, postgraduate studies, antiaircraft gun | afire, aflutter | anti-Nazi, afternoon | encage: sbs and vbs
must be considered syntagmas with a zero determinatum, the obs anti-Nazi, afternoon, encage being the respective determinants).

The preceding conceptual patterns are important in the determination of the stress: while a cb based on an adjunct/primary relation tends to have two heavy stresses (as in arch-enemy) or may even have the main stress on the prefix (as in subway), the prf has not more than a full middle stress in the other types.

The phonemic status of prefixes

3.1.15. Prefixes are semi-independent morphemes which behave like first-words of compounds in that they are followed by an open juncture: they do not fuse syllabically with their respective bases (subborn, but sub-order, distinct, but dis-tasteful where aspiration characterizes the t following dis- as word initial; and in mis-state we have a geminated e which can occur at morpheme boundaries only; cp. dis-armament [s] and disaster [z].

With the exception of /en-, em-/ whose variants are phonetically predictable, prefixes have the same phonic form in all conditions: sub- is always [sab] whether it has a middle stress as in subconscious or a heavy stress as in subway (cp. the unit word subversion as opposed to an (artificial, but possible) subversion), re-, de- are always [ri], [di]. A prefix has no allomorphs which clearly distinguishes it from graphically similar etymological elements; in recognize with [re] and relax with [ri] re- is a mere etymological element of non-composite words.

3.1.16. The semi-independent, word-like status of prefixes also appears from their treatment in regard to stress. With the exception of regularly unstressed a- (as in afire, afluter), be- (as in befriend), and en-, en- (as in emplane, encage) all prefixes have stress. To illustrate this important point a comparison with non-composite words of similar phonetic structure will be useful. If we compare the words ré-fill and répeat, morphemic re- /ri/ in re-fill is basically characterized by presence of stress whereas non-morphemic re- [ri] is basically characterized by absence of stress. This is proved by the fact that under certain phonetically unpredictable circumstances, the phonemic stress of re- in ré-fill, though basically a middle stress, can take the form of heavy stress whereas phonemic absence of stress can never rise to presence of stress. They réfilled the tank may become they réfilled the tank (for the sake of contrast) or they réfilled the tank (for emphasis), but no such shift is conceivable for monomorphic répeat, incite, préfer etc. which invariably maintain the pattern no stress / heavy stress. One might object that in cases such as rreprésent, intémision, académic non-morphemic elements receive a middle stress. They do, but for purely rhythmical reasons: at a distance of two syllables before the heavy stress, a basically unstressed syllable receives a middle stress. This is the only secondary stress marked in most dictionaries (OED, Webster, Kenyon-Knott; Jones marks most prefix obs with double stress). From the phonemic point of view, however, this stress has no value at all. It is a rhythmically conditioned variant of the lowest degree of stress (= absence of stress) and weaker than the middle stress of e.g. réconstrué. I disagree with Newman1 who classes this type of stress as a variant of middle stress (179 and 184).

3. 1. 17. The basic form of stress which prefixes assume is that of the middle stress. The position of prefixes is similar to that of personal pronouns and possessive adjectives in that they are likewise more often than not used in conjunction with words functionally and semantically more important than the pronouns (mý bróther, wë like). Therefore we cannot assign the basic degree of heavy stress to prefixes though, on principle, the form of heavy stress is open to any morpheme that bears a phonemic middle stress.

3. 1. 18. Deviations from the basic stress pattern are conditioned by various factors.

1) We have already pointed out the importance of the underlying concept. With many speakers, the middle stress tends to become a heavy stress when the prefix stands in adjunctal relation to the following substantive, especially when the middle stressed syllable of the prefix is separated from the heavy stressed syllable of the basis by an unstressed syllable: súb-committee, súper-highway, crypto-cómmunist, árch-enemy (with arch- obs two heavy stresses seem to be the rule).

2) When a monosyllabic prefix immediately precedes the stressed syllable of the basis, the usual pattern is, however, that of middle stress/ heavy stress: cò-hóstess, èx-président.

3) In the event of a monosyllabic basis the prefix shows a growing tendency to receive the main stress while the heavy stress of the basis is shifted to a full middle stress: súbway, prévièw, prótocónch, pseùdobrànch.

4) The basic full middle stress of the prefix in adverbial function may be reduced to a lighter variant of middle stress when a monosyllabic prefix (de-, re-, un-, mis- etc.) finds itself placed after an unstressed syllable and immediately before the heavy stressed syllable of the basis (e.g. to unseát a senator, to mismánage it). This is a purely rhythmic phenomenon, and many speakers avoid it by giving the prefix the main stress if the interval from it to the next heavy stress makes it possible (as to unseát the sénator, to unvel the móbument, but not in to mismánage it). This rhythmic weakening of the full middle stress is probably what has moved the writers of most dictionaries (OED, Webster, Kenyon-Knott; not Jones, see above) to mark these prefixes as unstressed when the heavy stressed syllable of the basis immediately follows, giving a secondary (i.e. phonetic, rhythmic) stress only when the distance between the prf and the heavy stressed syllable of the basis is at least one syllable (défróst, but dématerialization; misconnt, but misconcéption etc.).

5) It is probably due to the implicit idea of contrast that cbs with the following prefixes always have the main stress on the prefix: ante- (ánterródren), anti- (ántichrist), counter- (cóunterattåck), fore- (föréfather), step- (stépfåther). This tendency is most fully developed with locative particles: óuttróient, under-currónt, byþroduct, óvercódt. Two-stressed syntactic cbs (e.g. in áfter yeàrs, an óver cópy) are far less frequent than forestressed compounds.

6) Implied contrast also accounts for the regular forestress in such words as súpermán, súperfórtress. For the same reason many speakers usually stress the particle in súb-órder, súb-fàmily, súb-spècies, súb-tìtle. This stress pattern,
however, is unstable. The word *subcommittee* which is so much used in these
days, is pronounced either as *subcommittee* or *sub-committee*.

7) Despite traditional stress indications in OED stress alternation is now
morphophonemic with re- and inter- obs to distinguish a verb from a substantive.
It occurs when the basis is monosyllabic: *rēfill* vb ~ *rēfill* sb, *rēmāke* vb ~
rēmāke sb etc., *interdct* vb ~ *interdct* sb, *interplay* vb ~ *interplay* sb etc.

3. 2. 1. a- /a/ (type ablaze)¹

The prf goes back to the OE prepositional relation, to sbs, adjs, and vbs. It conveys the
meaning ‘in a state or position of . . .’. In combination with vbs it is approximately an equivalent of the -ing (ablaze = blazing), but the vb is, as are all a-
derivatives, only in predicative use. It had, by the ME period, developed into a-, as in ablaze, abrood, aday(s), afield, afire, afoot, aground, obs. agrief, ajar, alank, alee, alight, obs. arank, obs. aroom ‘at a distance’, arow, aside, asleep, athrong, awork. There were several words which could also be apprehended as derived from vbs, as ablaze, aburst ‘in a burst of rage’, awane, aswoon (which may orig. be the ptc geswögen, as the OED supposes), awork. Subsequent usage has preferred deverbal coinages, all from intransitive vbs, though
denominal derivatives have likewise been made. Many of the roots are mono-
syllables, others are disyllabic. But of the latter only vbs in -er, -le occur, most of them frequentative vbs. Outside this group is *aglisten* (q. Je VI. 7. 52). I
give the examples in chronological order. From the 15th c. are recorded agaze, 
acrook ‘crookedly’, from the 16th c. ajar ‘jarring’, atilt, aflaunt, acry, askew (fr. 
skew ‘move sideways’), aweary. From the 17th c. date adrift, agape, astug, 
astoop, asoak, astride, aswim, awrack, from the 18th c. astraddle, asquat, atwist. 
The 19th c. was exceedingly productive: abask, accock ‘in a cooked position’, 
adance, adangle, aflutter, aflower, aflutter, afoam, agasp, aglare, agleam, aglim-
mer, aglitter, aglow, agush, ajoog, aripple, aseethe, ashake, ashiver, ashine, awhimmer, 
asmeare, asmoulder, asnort, aspout, asprawl, asspread, asprout, asquirm, astare, 
avir, aswarm, asway, aweat, awing, athrill, athrob, atingle, atremble, atumble, 
avash, awave (Browning), awhir, awhirl, awink, awobble, awreck.

3. 2. 2. Denominal derivatives after the ME period are ahorseback (arch., 
1490), ashore, a- tiptoe, a-week, aflame (16th c.), aheight ‘aloft’ (arch.), atop (17th c.), 
awest, awing, aheap, ajoint, adrest, ahunt, astrain, arake ‘on the rake, inclined’ 
(19th c.). We have a good number of nautical terms, as aweather 1599, atrip 
1626, aweigh 1627, astern 1627, asterboard 1627, aposp, aquarter, asea, asouth, 
astay, awest (all 19th c.). Dialectal or regional are aglee, a-plague ‘plagued’ 
(q. in ADD).

In ME a few derivatives from adjs were coined, as abroad, acold, aflat, aleft, 
aloud, awrong, awry. But the type has not become very productive. MoE is 
asudden 1865, the OED quotes adeep from E. B. Browning. In ADD I find 
ahungry and aloose.

¹ J. H. Neumann, A nineteenth century ‘poetic’ prefix (Modern Language Notes 
LVIII, 1943, 278 ff.).
3.3. a- /æ, æ/ (type asymmetric)

This is an adjectival prf. It forms words along the lines of wffb, the terms belonging in the main to Nat. History or Medicine. The prf represents Gr α- (alpha privativum) which is ultimately the same as E un-. In Greek it originally and chiefly formed desubstantival adjs (type ἄμορφος 'formless'), then also a few contradictory opposites of simple adjs (t. ἄσθος 'unwise'). These are the types that interest us. A few passed into Late Latin. Neo-Latin took up the type, and the phraseology of science appended the prf to Latin stems also. Formally, a- is changed to an- when standing before a vowel, according to the linguistic laws of Greek (an-axios is the opposite of axios). The English coinages are all derivatives from a substantival basis, though practically they are often analysed as opposites of unprefixed adjs. The meaning of prefixed words is therefore either 'without, devoid of, not affected or characterized by what is denoted by the root' or 'not...'. Examples: acapsular, acalyculate, acranial, acardiac, achromatic, acaulescent, acaulos, acauline (caulis 'stem, stalk'), acaudal, acaudate, aglossal, aplacental, afebrile, apyretic, aseptic, acritical, anamnmonic / anelectric, anharmonic, anhydrous.

Outside the before-mentioned branches of science are amoral, atonal, atemporal 'timeless', avolitional, asymmetric.

A substantival coining is asynchronism 'non-correspondence in time' 1875, but asymmetry is OGr asymmetrica.

The words are almost all 19th c. A few are older, as asymbolic, -al 1660, asymmetric 1690, asyllabical 1751.

3.4.1. ante- /ˈæntə/

is a MoE prf which forms learned or scientific sbs and adjs, both on a native and foreign basis of coining. It conveys the meaning 'fore-, pre-, preceding, coming before...'. English owes the type to ML. Classical Latin used ante-chiefly with parasynthetic adjs, as ante-lucanus, -meridianus, -muranus, -nuptialis, -pilani, -signani 'troops standing before the pilani resp. the signa', -urbanus. There were also deverbal sbs and adjs, as antecoccupatio, anticipatio, antepagamentum, antependululus and participial sbs, as antefactum, antefixum. For the English type anteroom, AL cbs such as antepes 'forefoot, forerunner', antecanis 'foredog' (name of a stellar constellation), and ML antetemplum may have served as patterns.

3.4.2. English has, from about 1500 on, tried coinages, but they have never become popular. Fore- and, since the 19th c., pre- have been stronger rivals. Examples are antetheme 1494—1561 'text prefixed to a sermon as its theme' obs., antedate 1580, obs. antefact 1623, antetype 1612, antenumber 1626, anteporch 1624, antenoon 1686, ante-eternity 'quality of having existed before eternity' 1678, ante-court 1691, antestomach 1691.

Architectural terms are ante-chamber, -chapel, -closet, -choir, -room, -hall, -church, -portico a.o. (see also prec. group). Anteriority is expressed in antedawn, -spring, -noon, -taste, -predicament and a few others already mentioned.

The earlier spelling is often anti- which may render the pronunciation [ænti]. But a similar confusion we meet with in French, and Latin has ante-
pagentum beside antipagentum (the reverse is antechristus for antichristus). That the ultimate identity of anti- and ante (the basic meaning is 'opposite') cannot have been felt hardly needs saying. Probably, the French and English spellings anti- are due to the influence of Italian where ante- has become anti- (antiporta, anticamera).

3.4.3. Latin-coined adjs based on a preposition/object relation belong chiefly to the 19th c. Only a few words are older. The concept of place ('situated in front of . . .') underlies such obs as ante-caecal, ante-orbital, antepectoral, all 19th c. The temporal sense 'occurring, existing before . . .' is found in antediluvian 1646, antemeridian (L) 1646, antepaschal 1660, antemundane 1731 and 19th c. words like antebaptismal, antechristian, anteecclesiastical, antehistoric, antenatal / ante-Gothic, ante-Mosaiical, ante-Norman.

This use has led to the combination of ante- with preadjunct substantives, as in ante-Communion Service, ante-sunrise light, ante-war taxation (19th c.). Such combinations are now being outrivalled by formations with pre-. A partial reason for this is probably the homophony of ante- and anti-.

Ante- has the main stress in substantival obs, in adjectival and preadjunctal obs the main stress is on the root.

3.5.1. anti- /'ænti, 'æntai/

is ultimately OGr anti 'counter, opposite, instead', found in loans such as antipodes ME, antiphon 1500, antithesis 1529, antiphasis 1533, antidote 1543, antilogy 1614 a.o., which came into English either directly from Greek or indirectly through the medium of Latin. The real English prf anti- is, however, only in part due to OGr words. The OGr prf was used with vbs and deverbal nouns, a usage that has not been imitated in English. The OGr denominal coinages are different in type from PE formations, as we shall see. We have words such as antistratēgos, antibasileus where the particle has the meaning 'acting' (cp. L propraestor with its Gr equivalent antiktamias). Latin adopted anti in a few obs: Caesar's Anticato is 'a reversed Cato (i.e. the book entitled Cato)'. Of the same type are Eccl. antitheus = Gr antitheos 'a reversed god, i.e. the devil' and Gr antichristos (1 John 2, 18) which passed into Latin as Ante-Christus 'a rival (if pseudo-) Christ'. This word is the first anti- word in English and has become the archetype for a whole group. En antichrist is first rec. about 1300 in spelling anti- or ante-christ and represents OF antecrist. The next coinages on the pattern also belong to the religious sphere, all denoting the rival candidate of the opposite party: antipope 1579 (after ML antipapa), anti-deity 1602, anti-creator 1642 (Milton), anti-Messiah 1677, antigod 1684. Not religious are antiking 1617 and anti-duke 1872. Other words are anti-apostle, -creation, -music, -poison (17th c.), -religion, -hero, -priest (18th c.) where the implication is likewise that of 'spurious', or 'of the reverse kind', no longer in use. In the second half of the 16th and in the 17th c. the particle was pretty much in use with non-personal obs (see NED) with meaning 'counter, opposing', but such formations have not subsisted. There is antimask, -masque 1613 with the implication 'not the real one, but the grotesque interlude between the acts of the masque', a counter-masque so to speak. The word antipole 1822 may belong here, too.
3.5.2. A 17th c. development is the prepositional type anti-Calvinist 'one who is against Calvins'. Examples are anti-Becketist, anti-Bonapartist / antialcoholist, anticommmunist, antifascist, antifederalist, antifederalist, antinationalist, antishabbatarian, antitrinitarian / antimason, antinazi, antipuritan, antisemite.

The object of the preposition may be a personal name, as in the type word, or a common substantive, as in antialcoholist. Many combinations admit of double analysis: anticommmunist may be interpreted as anti-commun(ism)-ist with the suffix of the determinant group left out before the determinatum-ist, or as a derivation by a zero morpheme from the prepositional group anticommmunist. Clear zero-derivatives are cbs of the antinazi type.

3.5.3. Early recorded adjs are anti-Platonic 1638, antiprelatical 1641, from the second half of the 17th c. antiecclesiastic, antifanatic, antiministerial, antiroyal / anti-Arian, anti-Socinian, anti-Zwinglian. The type has been productive ever since, giving rise to antibiblical, anticlerical, anticommercial, antiintellectual, antitraditional / anti-American, anti-British, anti-Semitic / antiforeign and others.

3.5.4. Parallel to the type anti-Calvinist is anti-Calvinism which does not seem to be older than the 17th c. The title word and anti-Arminianism are recorded 1674, but most other formations are 19th c. or later words, as antismoralism, antipatriotism, antirealism, antisemitism.

3.5.5. As the result of anti- preceding an adjective we get the particle prefixed to pre-adjunctal substantives as in antifreeze (party). The title word is probably the earliest example (rec. c. 1650) while most others belong to the 19th c.: anti-administration, anti-immigration, anti-labor, anti-slavery, anti-trust, anti-vaccination, anti-vivisection, anti-war (law, league, movement, party etc.). The type has paved the way for similar combinations with other particles (see ante-, inter-, intra-, post-, pre-, pro-, sub-, trans-), a 19th c. development.

3.5.6. Beside the preceding polemic, political sphere the prefix is used in chemico-medical terms with the meaning 'counteractive, neutralizing, preventive of...'. We have many adjectives which may also be used as primaries with meaning 'agent, remedy', formed on the pattern anti-catarrhal (i.e. a type parallel to the type anti-Platonic). The type goes back to the 17th c. From the second half of the 17th c. on we find examples such as antifebrile 1661, anti-hypnotics 1681, anti-hysteric, anti-catarrhal, anti-sudorific, anti-pleuretic, anti-pyretic, anti-convulsive, anti-hydropic, joc. anti-fogmatic 'hard liquor' US (all 18th c.), anti-bacterial, anti-corrosive, anti-diphtheritic, anti-neuritic, anti-pestilential, antirachitic.

3.5.7. A semantic variant of the type anti-court (party) is the 19th c. development antiaircraft (battery) which has become especially productive in recent years. The meaning of such cbs is ('agent, device, product etc.) used against, destroying, preventing...'. Examples are antifade, antiflash, antifreeze, antigas, antiglare, antiknock, antitrust, antitheft, antirust. Some are (also) primaries, as antifreeze, antifriction, antiknock, antimacassar, antitoxin.
3.5.8. On a NL basis of coining we have various scientific sbs and adjs in which anti- has the shade of locative or adversative oppositeness, as anticlassic, anticlassmax, antisolar, anticyclone, antipetalous, antihemisphere.

Scientific words were originally coined on an OGr basis of coining, which means that anti- becomes ant- before a vowel or h, as in antacid, antalgic, antitemetic, antiepilectic, antihelmintic etc. But there is now a stronger tendency to form words on a native basis, so anti- tends to be preserved throughout. The result are words like anti-acid, anti-aphrodisiac, anti-apoplectic, anti-arthritic, anti-asthmatic, anti-emetic, anti-icteric, anti-hysteric.

3.5.9. The particle bears the main stress in obs where it has attributive character, i.e. in the type antichrist; in obs based on a prepositional relation the heavy stress is on the root while the particle bears a middle stress only. Antiserum (stressed on the root) is formed after antitoxin.

3.6.1. arch- /a(r)tʃ/ 

Through Christian Greek, archi- became a prefix with ecclesiastical words and passed into Ecclesiastical Latin. From there it entered the languages of christianized nations. This is why in Old English we have words like arcediacon, arcebisceop, arcestol.

The meaning of arch- is ‘chief, principal, high’. The particle is prefixed to sbs denoting the holder of an office, either ecclesiastical or profane, or to general personal sbs, today only in a depreciative sense, conveying the shade of odium. Continuing the line of OE we have arch-dean 1425—1646, arch-flamen 1425, arch-priest 1485, arch-presbyter 1562, arch-prelate 1594, arch-patriarch 1579, arch-primate 1583, arch-chaplain 1614.

With profane words we find it in connection with titles of the Holy Roman Empire, as arch-marshat 1634, arch-steward 1643, arch-chamberlain 1693 or with translated foreign titles and their derivatives, as archduke 1530, archduchess 1618, archducal, archduchy 1680. Its use with other positions is archaic or obsolete now, as arch-governor 1567, arch-chief (= Christ) 1590, arch-player 1610, arch-architect 1640, arch-shepherd (= Christ) 1656, arch-gunner 1664, archphilarch 1683, arch-eunuch 18th c., arch-apostle 1726, arch-jockey 1761, arch-druid 1839.

In a few words arch- means ‘first in time, original’: the arch-founder of Prelaty, S. Peter 1641, arch-god 1846, arch-messenger 1835, the non-personal arch-christendom 1683 (= G ur-).

With the meaning ‘chief, greatest, leading’ it has formed a few non-personal sbs, now obsolete, as arch-sin 1598, arch-beacon 1603, arch-city 1633, arch-fire 1654, arch-heart 1685, arch-piece 1630.

3.6.2. As early as the beginning of the 16th c. the prefix is frequently attached to personal sbs or names implying odium, thus intensifying the pejorative nuance. In the 16th and 17th c. it was chiefly used with words for the devil, Judas Iscariot, for heretics or other persons religiously or morally offensive, and has kept its character of detraction ever since. The earliest example seems to be arch-pirate 1489 which renders L archipirata (= OGr archi-peiratēs). After this were coined arch-traitor 1539, arch-enemy 1550,
arch-foe 1615, arch-fiend 1667, arch-politician (= Satan) 1665 / arch-heretic
1528, (that Romish) arch-baalam 1579, arch-rebel 1583, arch-cosener 1594,
arch-villain 1603, arch-defender (of drunkenness) 1616, arch-exorcist 1612,
arch-devil 1649, arch-rogue 1650, arch-turncoat 1654, arch-hypocrite 1685,
arch-Semipelagian 1674, arch-plagiar (Adam) 1659, arch-wench (Venus) 1656,
arch-pretenders (to sanctity) 1677, arch-boutefeu 1685, arch-murderer
1711. 19th c. are arch-cheater, arch-deceiver, arch-depredator, arch-disturber,
arch-humbug, arch-knave. In Late Modern English, arch- is no longer used
in the neutral sense of 'chief' (at least the OED has no quotations)
so the following instance is app. isolated: Mrs. Ward is well known as
the arch exponent, in England, of the roman à thèse (The Times Lit. Spl.
June 15, 1951, p. 372). Arch here cannot be the independent word (see
below 3.6.3) either.

The corresponding G prefix erz- has had a similar development. With a few
exceptions there have arisen only pejorative words since the 16th c., as Erz-
bösewicht, Erzschelm, Erzjohann, erzjaul, erzjrob etc.

English has never formed adjs with arch- (in contradistinction to French
and German; F archiconnu, archiplein etc., German coinings just mentioned).
Milton formed arch-chemic 1667, a later nonce-word is arch-noble 1761.

Archangel o 1175 has prob. undergone the direct influence of L archangelus,
as the pronunciation [a(r)k] seems to indicate.

3.6.3. The frequency of obs with arch- helped to establish the use of
arch as an independent word. The particle has been used as an adj from
about 1550 on, first in sense 'chief, prime', with a depreciative nuance,
then with the meaning 'clever, cunning, crafty'; i.e. it developed out of
obs with the profane words quoted above, when the use of arch- in the
religious sphere had already slowly ebbed back. Today the word arch is
chiefly applied to women and means 'pleasantly mischievous'. The first
quotation for this use is from 1810 in the OED: arch was her look, and she
had pleasant ways.

3.7. auto- /ˈoʊto,ˈoʊtə/

represents OGr auto- 'self', a very frequent formative in OGr wf. Though
Late Latin has a few loans, as autochthones, autogenes, autographus, automatus,
automaton, it is much later, in Modern Latin, that it becomes a formative
with learned words. After the pattern of Neo-Latin, English word-coining
starts in the 19th c. Especially since the two last decades of the century auto-
has become very productive as a scientific and technical prefix. The general
meaning is 'in respect of the self', and its uses are somewhat parallel to self- in
combination. Auto- is chiefly prefixed to sbs denoting agent, action or state,
and to adjs, in relations corresponding to that of a subject, an object or a
subjunct in a sentence. Exs are auto-biography, -biographer, -erotism, -genesis,
-hypnosis, -therapy, -stability, -suggestion, -infection, -inoculation / auto-
infant, -inosticant, -genetic, -poisonous, -infective, -inveive.

In technical jargon, auto- is prefixed to names denoting apparatuses or
devices with the meaning 'self-acting, self-propelling, automatic' or the like.

7 Marchand, The categories
This use is recorded from about 1885. Exs are auto-accumulator, -coherer, -converter, -detector, -transformer; autoharp, autopiano.

Clipping-cpds are cbs such as autocar, autotruck, automotor, autobus, where auto- is short for automobile (which is itself a loan from French).

3. 8. 1. be- /bi/

is historically the unstressed form of the particle by. The primitive meaning is therefore 'by, around, about, near' etc. which underlies composite particles as before, behind, beside, beneath, beyond, between, benorth, besouth and other prepositional cbs as behalf, behest, behoof. But this type was rare so far back as OE. Because is not recorded before c 1305.

3. 8. 2. With vbs, be- has since OE played the role of an inseparable prefix, in different shades of meaning. The locative sense 'about, around' appears in OE bedeltan 'bedelve', belicgan 'belie, lie near', berinnan 'run or flow round', begyrdan 'begird', bewalhian 'bewallow', besawan 'besow', becnytian 'beknit', bewyrcan 'bework, embroider' (1637). In later formations like beclothe 1509, bedeck 1566, bescatter 1574, bestrew 1667, be-, meaning 'about', is rather an intensifier of the verbal idea.

In some cases the prf does not seem to add or to have added any nuance to the verb, as in betrap 'catch in a trap' OE, betoken 'token, signify', obs. bemean 'signify' (1300—1502), obs. betrust 'trust' (1440—1748), befriend 1559; in others the prefixed verbs came to lose connection with the respective unprefixed verbs, either in content, or in form, or in both, as become, begin, behold, beget, befall, obs. bename 'declare solemnly' (all OE), behave (fr. have) 1440, beckal 'challenge' (ME) or 'call names' (1683), befit 1460. The unprefixed counterparts have died out of begin OE, bequeath OE, believe 1200, betray 1275. Friend is arch. now. Betroth (ME bitteuðien) is a parasyntactic derivative from treude 'truth' (later assimilated to the byform trouthe), the simple vb troth (now obs.) is later.

3. 8. 3. Phrases of the type 'bemoan a man' may orig. have been analysed as 'moan about a man', i.e. as a vb plus its prepositional object: beshine 'shine on', beclip 'embrace' (obs.), beride 'ride beside or over', obs. betell 'tell (things) about' OE—1567. But the result was that be- came to make an intransitive vb transitive, i.e. in the above phrase 'a man' became the direct object of the verb 'bemoan'. To this day be- has chiefly formed transitive vbs. A few examples are bedip, obs. begride, belie, beweep, begnaw, besnear OE, obs. beclap, bewrap, besprinkle, becharm, besiege, bewail (ME), bedaub 1533, baptew 1555, bedash 1654, belabor 1596, bemock 1607, bestick 1623. For the sake of classification, other vbs are listed in various groups below.

3. 8. 4. In connection with verbs such as smear, weep, wail, the prf is easily understood as an intensifying element. It is also possible that the sense development was from 'around' to 'all around' to 'all over, thoroughly, completely' which be- had acquired by the ME period. This sense underlies besmear OE, bewail 'wail loudly', bebleed 'cover with blood', beblot 'blot all over', beslobber, beslubber, besoil ME, berate 'rate vehemently, scold' 1548, bestir 1549, bedeck
1566, bespout 1575, beslaver 1589, bedazzle 1596, belam 'lam, thrash thoroughly' 1595, bebelliss 1598 'bless profusely', bewilder 1684 'wilder (arch.) completely'. Others are bestick, bestrew, bescratch, bescrawl, bescribble, besplash, bespot, bespeckle, besputter, bespatter, besmirch, the obs. vbs bespurt, bespurtle, besquirt, bespoutl. Words of the 'besmear' type represent the majority of the group.

3. 8. 5. When intensity is overstressed, there is but a step to the meaning 'overdo the action', esp. if the vb itself favors the development, as in bedrabbles 1440, bepaint 'paint obtrusively' 1555, beblister 1575, bedabble 1590, beclaw 1603 (cf. G verkratzen), bedizen 'dress out with vulgar finery' 1661.

According to the meaning of the unprefixed vb, the overdoing of an action may turn into the opposite of what is originally meant by the prefix, i.e. into destruction. Obs. behack (a sword, a blade) is the equivalent of G zerhacken. Here belongs the so-called privative meaning of the prefix, which is, however, only an aspect of intensifying be- with vbs that are privative in themselves. Verbs of this category are bereave, the obs. vbs bedeal, benim, and OE vbs like bescieran 'shear', benéotan 'bereave, deprive', beecerfan 'carve'. In ME were coined bebar 'bar, debar' (a 1230—1649) and bestow 'stow away' (1393 arch.). This group is joined by vbs with a substantival basis such as behead and the obs. vbs belimb, beland, meaning 'deprive of...'. In German there are many more vbs of this type (see Wi 108. 2).

3. 8. 6. The usual meaning of denominal vbs containing the prf is, however, ornative, either in the sense 'make (into)...' or 'furnish, cover etc. with...'. The first meaning is found with adjs as well as sbs. On a deadjectival basis were coined befast (OE befestan), befoul (ME befulian). But the type grows common in the second half of the 16th c. only. The vbs are primarily intensifying as compared with their unprefixed counterparts, but the predominant nuance is that of conspicuousness, obtrusiveness, though not with all words. Examples are becalm 1559, bedim 1566, besot 1581, bemad 1605, besaint 1609, belate 1642, bemean 1651, belittle 1796.

3. 8. 7. Derived from sbs with the underlying notion of quality, title, or the like are befool, beshrew 'make wicked' ME, bemonster 'make monstrous' 1605, beslave 'make into a slave' 1615, with a tinge of ridicule in words like bespouse, beknight, bebaron, bedoctor, bebishop, beclown.

The sense is often 'call (a p.)...', as in begrace 1530, beknavse 1525, belord 1586, obs. behwore (1604—1623), bemadam 1614 a.o., which may be mere mock titles. Today this is the only nuance such coinages have.

3. 8. 8. From sbs that do not denote a quality or title are derived vbs with the meaning 'affect, provide, cover, surround with...'. The root words are chiefly concrete sbs. The type grows common in the 16th c., though we have coinages from OE on. Examples are bewall, besnow OE, becharm, becloz, bedew, bedrop, beguil, besmoke, bewitch ME, begore (1500—1683), belime (1555—1674), bemire 1532, begrime 1533, bejewel 1557, bestain 1559, beblood 1580, becrown 1583, begift 1590 H, becloud 1598, bemist 1595, benet 1602, besmut 1610, bestar 1612, becurl 1614, befringe 1611, belace 1648, belute 1740, begem 1800, besmutter 1831, begirdle 1837, befur 1859.
The idea of overloadedness is inherent in all the preceding words, and a tinge of mockery or disparagement may, but need not, accompany them. With participial adjs the shade implied is always that of depreciation or ridicule, the serious and normal counterparts of such coinings being words without the prf. Words like bebelted, beflogged, befathered, beribboned, berouged, bepowdered, beturbaned (see OED s.v. be- 7) are instances of this usage.

It is only with the shade of overloadedness, disparagement, or ridicule that be- is a productive morpheme in OE.

3.8.9. Like other Germanic languages (see Wi 103), English has used be-chiefly for the formation of transitive verbs. In intransitive use are or were bechance 1527, belove 'to be pleasing' (ME only), bemoan OE, besteal 'move stealthily' (OE-1597), befall OE, belong* ME, betime 'happen' (ME only), beweep (ME only). In reflexive use are or were behave, betake, besteal, bewend 'turn away' (OE-ME), beweld 'use one's limbs' (ME-1577).

3.9.1. bi-  /bai/

is a Modern English prf, chiefly found with biological words, almost all of them parasynthetic adjs. They belong to the international scientific vocabulary and are coined on a Neo-Latin basis, partly also on the native type of extended bahuvrihi-cpds. The types are: biangular, biangulated (both Latin types), biforked (i.e. type fivefingered). The principal meaning of all is 'having two...'. Examples are biauricular, biauriculate, biaxial, bicapsular, bicephalous, bicorporal, bicapsulate, bifacial, bifilar, bifocal, bilobate, bipetalous, bipolar, bisexual, bistalkate / bipectinated, bipinnated / bicoloored, bifurred, biforked, bilobed, bimotored, bivalved, bisected.

3.9.2. As possessive adjs can be apprehended as ptc, the above meaning comes to be 'being... double, twice'. Bipinnate may be analysed as 'having two pinnae' or 'being doubly pinnate'. This gave rise to the type biconcave which does not appear to exist in Classical Latin. So bi- is prefixed to adjs applied to things which exist in pairs or have two sides. The implication then is 'doubly...' or '... on both sides', as with the type word biconcave, analysable as 'doubly concave' or 'concave on both sides'. Other instances are biconvex, bilabial, bimanual, bicurval, bipyrimal, birectangular, bi crescentic, biflex.

3.9.3. In terms of chemistry bi- denotes "the presence of two atoms or equivalents of the constituent to the name of which it is prefixed, or the presence of this constituent in double the ordinary proportion, as in bicarbonate, bisulphate. Bi- and di- are sometimes interchangeable, but di- is now usually preferred. In organic chemistry bi- is used esp. to denote the doubling of a radical or molecule, as in biphenyl" (Webster's Collegiate Dictionary s.v. bi-). These words are coined as parasynthetic formations, parallel to the types listed above (e.g. bi-chrom-ate). A few examples: bicarbonate, bichloride, bi-chromate, biphenyl, bisulphate.

In anatomy bi- indicates relation to each of two symmetrically paired parts, as in bialveolar, bi-ilial, bi-mastoid, biparietal, bilateral.
3. 9. 4. Early coinages are bicorporated 1572, obs. bicapited 1572, biforked 1578, bicapsular 1679, bicipitous 1646, bipennate 1713, bilobed 1756, bimaculate(d) 1769. The majority of such words are, however, 19th c. Examples

Bahuvrihi-sbs are rare: bipod (after tripod), bi-prong (after bident = L bidens), bi-valves ‘two-winged door’, bivalve ‘animal with a two-valved shell’. The only common word is bi-plane 1908.

In EMOE the prf was used without any pronounced significance, as in bifold 1609, bicleft 1627 (prob. after bipartite 1506 = L bipartitus). Isolated also are bi-millionaire, bi-nomenclature where bi- means ‘double’.

3. 9. 5. After biennial 1621 (rendering L biennalis) ‘belonging to a biennium, lasting two years, occurring every two years’ were coined bimestrial 1846 (the Latin is bimestris) ‘lasting two months’, bimensal, bicentennial, even words with a native basis, as bimonthly, biweekly. The last two, also used as sbs, chiefly refer to or denote periodicals that appear every two... On the other hand, the hybrids biannual, biquarterly, biyearly, bi-weekly mean ‘occurring twice a...’. Because of their ambiguity, they are often replaced by semi-obs. This usage is 19th c. Cp. Word-Study 31. 4. p. 6, 1956.

3. 10. circum-/sə(r)kəm/

forms words on a Latin basis, verbs (and their denominal derivatives) and adjectives. The respective Latin types are circumambulare and circummuranus. Coinages of the first group are vbs of the ‘move’ class with meaning ‘...around’. English usage continues a Latin tradition rather than adding a new element. Many of the words are merely anglicized Latin, others are Latin virtually; i.e. a Latin original does not seem to be recorded (which does not mean much, as a complete dictionary of the entire Latinity is so far wanting). The type comes into use towards the close of the 15th c., is strongest in the 17th c. when it is used also for wfnb, and slowly ebbs back in the 18th c. The 19th c. has only occasional coinings. Examples are circumambulate, circumaviate, circumnavigate, circumfuse, circumvallate / circumambulation, circumgyration, circumnavigation, circumvallation, circumrotation, circumvention / circumfluent, circumambient, circumjacent, circumadjacent / circumnavigator / circumnavigable.

Examples of obs formed on a native basis, all nonce-words, most of them from the 17th c. are circum-bind, -flow, -glaze, -roll, -stand, -walk, -crossed, -beamed, -flanked, -bendingly.

Words of the type circummuranus ‘situated around the wall’ were infrequent in Latin. Neo-Latin found the type useful for scientific terminology, and in English we find it from the 19th c. onwards (circumcentral is rec. from 1708). The adjs belong to anatomy, astronomy, and geography, the meaning expressed is ‘situated around...’, in astronomy also ‘revolving about...’. Examples are circum-anal, -basal, -columnar, -lental, -ocular, -oesophageal, -oral, -orbital, -renal, -umbilical / circum-arctic, -antarctic, -meridian, -axial, -zenithal, -spherical, -mundane, -solar, -Jovial, -lunar.
3. 11. **cis- /s/**

has formed several parasynthetic adjs on a Latin basis of coining with the meaning 'found, situated this side of...'. *Cis* is the Latin opposite of *trans* and has found its way into English through loans like *cisalpine* 1542, *cis-montane* 1792. The 19th c. formed a few scholarly words such as *cis-andine*, *cis-equatorial*, *cis-Elysial*, *cis-leithan* (fr. river Leitha), *cis-lunar*, *cis-oceanic*, *cis-pontine*. Older is *cis-marine* 1713. *Cis-atlantic* 1823 is about the only common word of the group.

The words *cis-Elizabethan* 1870 and *cis-reformation* (time) 1662 transfer the notion of place into that of time. The meaning here is 'belonging to the time after...', subsequent to...'.

3. 12. 1. **co- /ko/**

conveys the meaning 'together, joint, jointly' in words that are either scientific or learned or have an official, formal character. Coinages are chiefly nominal, but the prf is found with vbs also. The ultimate patterns are Latin, but the basis of coining is native. The Latin types are *coheres* 'co-heir' (a type still weak in CL but becoming exceedingly strong in LL and ML), *cooperare* 'co-operate', *co-aevus* 'of the same age'. English is app. indebted to French as well as to Latin for the growth of the first type: *co-executor ME*, *co-feoffee* 1458, *co-parcener* 1503 are loans from French. But it would otherwise be futile to be looking for one or the other influence in a word as the pattern is both Latin and French. The meaning of prefixed personal sbs is 'joint or fellow...', as *coheir* 1532, obs. *co-inheritor* 1526, *co-burgess* 1565, *co-ambassador* 1579, *co-brother* 1589, *co-defendant* 1640, *co-assessor* 1644, *co-guardian* 1643, *co-rival* 1678, *co-juror* 1735, *co-bishop* 1726, *co-regent* 1799, *co-ally* 1828, *co-signatory* 1865. Many of the preceding words belong to legal phraseology, as do also *co-assignee*, *co-auditor*, *co-creditor*, *co-debtor*, *co-legatee*, *co-tenant*, *co-trustee*, *co-respondent*, *co-obligant*. With this, English has only continued the line of Latin and Old French. Formations outside this sphere have recently become more and more frequent, as *co-author*, *co-hostess*, *co-producer*, *co-religionary*, *co-star*, *co-chairman*, *co-captain*, *co-player*, *co-pilot*.


Ptes are coined on a Latin basis, as *co-adjuvant* 1625, *co-efficient* 1665, *co-adjutant* 1708, *co-sentient* 1801, *co-adjacent* 1842.
Classical Latin had no adjs with co-. Adjs are found with growing frequency from LL on, as co-aeternus, co-aequalis, co-aetaneus, co-aevus. Most of the English coinages are parasynthetic adjs (many of them mathem. terms) on a Latin basis with the meaning ‘of the same . . . ’, as co-eternal ME, co-equal 1460, co-essential 1471, co-eval 1605, coetaneous 1608, co-instantaneous 1768, co-tidal 1833, co-polar 1852, co-planar 1862, co-seismal 1851, co-axial 1881, co-axal 1879, co-radicate 1882, co-centric, -centric.

Non-parasynthetic are obs. co-supreme 1599—1619, co-infinite 1654, co-extensive 1771, co-intense 1855, co-subordinate, all with meaning ‘in the same way or jointly . . . ’.

In astronomical and mathematical terms, co- is often short for complement. For such obs see the chapter ‘Clipping’ under ‘clipping-cpds’.

3. 13. 1. counter- /'kauntə(r)/

came into English through ME loans of OF contre-, countre- words. In OF the prf was both nominal and verbal, as it is still in PF. Such loans are the sb counterpoise, the adj counterfeit, the vbs countermand, countervail, counterplead a.o. But as a living formative counter- is more recent. It became productive in the second half of the 16th c., after and alongside of a set of military terms which were borrowed from French, as counter-gard 1523, counter-mure 1524, counter-mine 1548, counter-fort 1590, counter-battery 1592, counter-force 1609. Outside this domain are counter-poison 1578 and the obs. counter-feisance 1590.

3. 13. 2. English coinages are counterplea 1565, counter-blast 1567, counter-check 1559, counter-bond 1594, counter-stroke 1596, counter-work 1598, counter-charm 1600, counter-plot 1611, countercharge 1611, counter-pressure 1651, counter-blow 1655/60, counter-evidence 1665, counter-weight 1693, counter-deed 1727, counterspell 1725, counter-step 1720, counter-attraction 1763, counter-revolution 1793, counter-influence 1834, counter-wall 1836, counter-reformation 1840, counter-irritant 1854, counter-move 1858, counter-claim 1876. These obs are based on the relation ‘adjunct/primary’, their meaning is ‘. . . done in replication, as a rejoinder, in reciprocation of or return for a . . .’. This sense has, from the beginning, been the chief one. Derivatives are possible ad libitum: counter-demonstration, -declaration, -statement, -attack, -espionage, -propaganda, -threat, -suit, -assurance, -engagement, -obligation, -offer etc. etc.

We have the variant ‘. . . coming counter’ in a few sea terms, as counter-flow, counter-stream, counter-wave, counter-wind, counter-tide, obs. counter-sea. The group is as old as the foregoing one.

3. 13. 3. Counter- in the locative sense ‘opposite and parallel’ is likewise OF. In English it is frequent with terms of heraldry, for which I refer the reader to OED (counter- 14); but it occurs also with words of a more general character, as counterpoise ‘weight on the opposite side’ ME ( = OF contrepeis), counter-balance in obs. sense ‘opposite scale of a balance’ 1580, counterpart 1617, counter-opening 1611, counterscale 1645, counter-fissure 1656, obs. counter-bill ‘counterpart of a bill’ 1598, obs. counter-book 1622, counter-foil 1706, obs. counter-stock 1706, counter-arch 1726, counter-slope 1836, counter-point 1839, counter-earth 1857, counter-hem 1882.
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3.13.4. From the sense 'opposite and parallel' the additional implication 'parallel, second (i.e. not principal, original)' may arise, as found in countercopy, countermark, countercipher, countermanseal, countertype, counterdike, counterdrain, obs. counter-admiral (F) 'rear-admiral', technical terms all of them. General words with this shade of meaning do not occur.

3.13.5. With personal sbs the prf is rather unusual. Words like counter-apostle, -christ, -Jesus, -prophet, -Kaiser are rare. Word coining on the basis of a prepositional relation has likewise been unsuccessful (on account of anti-), and words such as counternatural, counterpest have remained isolated. Common is, however, counterclockwise 1888.

3.13.6. ME borrowed a number of vbs from OF, as countermand, countervail, counterwrait, counterplead, counterpoise, countersign. The only ME coinage is counterweigh (after counterpoise). Otherwise there are no English verbal coinages before the second half of the 16th c., and these are chiefly converted sbs (counterfeit ME is a converted adj), as counterfeit 1550, counterplot 1597, counterwork 1602, counterbalance 1603, countermarch 1625, counterbrace, counterclaim, counterinfluence. Not converted are counterequable 1667, counteract 1678, counterhit, counterstrike. The chief reason why counter- did not become a verbal prf is probably that it had early developed into an independent word. In adverbial use it is already ME (as a vb it followed somewhat later), so the position before the vb had limited possibilities.

3.13.7. The prf has the main stress in sbs coined on an adjunct/primary basis. The root has a middle stress. Verbs and verbal derivatives (counteractant, counteractive) have the main stress on the root while the prf has a middle stress.

3.14. crypto- /

means 'hidden, secret' and is prefixed to learned words of general currency as well as to scientific terms. The origin is OGr kryptós 'hidden, concealed', as used in NL (the corresponding OGr formative was krypto- or krypt-.) crypto-porticus 'concealed portico', cryptographia, cryptologia, cryptogamia. The first crypto- cbs occur in the 17th c., but they are nothing more than adapted Latin words, such as cryptography 1645, cryptography 1658, cryptographal 1691. Since about 1735, more extensively after 1850, crypto- has been made use of in the terminology of natural history. Cbs are formed on a NL basis, i.e. crypto-cannot, on principle, be considered as a prf added to an independent English word. Before a vowel, it is reduced to crypt- (cryptodent, crypt-opine etc.). It chiefly forms parasynthetic adjs of the type crypto-branchiate 'having the gills concealed'. Examples are crypto-carpo', -carpic, -cephalous, -crystal-line, -neurous etc.

The type crypto-Calvinist 'hidden Calvinist' is, so to speak, the counterpart of the type pseudo-Calvinist. A crypto-Calvinist is one who is a Calvinist but does not say so; a pseudo-Calvinist is a person who pretends to be a Calvinist but, in reality, is not. The type-word is the first of the group to occur in English (about 1760, while the corresponding terms were used in the 16th c. in France
and Germany to denote secret sympathizers with the Calvinists). The type has kept its tinge of secret adherence to a tenet or ideology ever since. Examples are crypto-Catholic, -Christian, -heretic, -Jesuit, -Communist, -Royalist etc., derivatives in -ism, and occasional other coinings such as crypto-splenic. Most of the obs have been coined since 1850.

3.15.1. de- -/di/

As for the origin of de- as a derivative morpheme, OED (s.v. de- I.) explains it by "the free adoption" of French verbs, but of the verbs it quotes in support (débarasser, débrutaliser, décentraliser, déconstiper, débanquer, débonder, déchaperonner, défroquer) only débrutaliser, décentraliser, and défroquer were actually introduced into English while débarasser and débonder could not have been analysed as syntagmas in English. Jespersen (MEG VI. 26.55) derives the prefix "from Lat. de- (or exceptionally from F des- Lat. dis-, as in defy)", but we do not understand how from defy, declare, denote, depend, designate a derivative pattern could have sprung. In a similar way, Koziol (§§ 324—325) does not attempt to explain how loans such as débar, décease, decay, decadence could be analysed and lead to new formations in English. The question, however, is important, as it concerns the rise of a grammatical pattern in a language.

3.15.2. There are two derivational patterns in English: de-militarize and de-louse, both basically meaning 'remove (what is denoted by the nominal basis) from'. The bulk of the first group is represented by parasynthetic verbs in -ize, analysable either on a nominal basis as privative verbs or on a deverbal basis, thus expressing the reversal of what is indicated in the unprefixed verb, i.e. 'undo the action of militarizing'. Verbs in -ate and -ify, both chiefly in scientific use, are less numerous. With the exception of verbs in -ate, both groups originated under the influence of loans from the French.

3.15.3. In French, dé- has at all times formed nominal verbs with a privative (panne ~ dépanner) and deverbal verbs with a reversative meaning (faire ~ défaire). Toward the end of the 18th c., when verbs in -iser become favorites, because they had a scientific ring, dé- verbs joined this group (dé-moraliser, dénationaliser were vogue words of the French Revolution). They found their way into English, where the pattern became very productive simultaneously with the rise and growth of the pattern in French. The almost instantaneous independence of the prefix de- in English is proved by the fact that French words like désoxygénér, désoxyder and others appear as deoxidize 1794, deoxygcnate 1799. English adopted the derivational pattern, not words. The verbs decardinalize and decanonicalize are recorded 1824, but they are nonce words. The adoption of the pattern starts with such words as demoralize 1793, decatholicize 1794, deoxidize 1794, denaturalize 1800, denationalize 1807, depolarize 1815, dehumanize 1818, débarbarize 1823, decarbonizE 1825. Later recorded are deanimalize 1865, deanthropomorphize 1874, decentralize 1851, dechristianize 1834, decivilize 1859, dechristize 1887, defunctionalize 1877, delocalize 1855, demagnetize 1843, dematerialize 1884, demilitarize 1883, demissionize 1883, demobilize 1866, deodorize 1849, depersonalize 1866, desexualize 1894,
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despiritualize 1868, desulphurize 1854, devocalize 1877. Our century has coined such words as defeminize 1900, dehaematize 1903, desensitize 1904, detritalize 1920, deurbanize 1924, devalorize (money) 1925, devirilize 1901, de-Stalinize 1956, denuclearize 1957.

The pattern is weak with verbs in -ify. We may quote such verbs as de-calcify, deossify, derivitify, deplastify; deeletrify, and denazify, a verb much used after World War II, more common in its derivative denazification.

Derivatives from verbs in -ate are more numerous. The pattern is found in Classical Latin, where we have denominal verbs like dearmarum, decorticare, defaecons, deflorare, deplumarum, detruncate, decororare, deglutinare, defoliare (ML) all meaning ‘deprive of (what is denoted by the noun)’. Early adaptations of the preceding verbs are depopulate (in Medieval Latin depopulare had the meaning ‘depopulate’) 1545, depilate 1560, defecate 1575, decoricate 1611, detruncate 1623, decolorate 1623, deglutinate 1609, defoliare 1793. The pattern led to the coining of such scientific words as desulphurate 1757 (through desulphuration), de-oxygenate 1799, deoxidate 1799, desophisticate 1827, defibrinate 1845, decaudate 1864, denitrare 1863, dehydrate 1876, decerebrate 1901, decapsulate (surgery term) 1907.

3.15.4. As to the character of the verbs of the three preceding groups, -ize verbs are predominantly learned, many of them being scientific. Verbs in -ify (with the exception of denazify, denazification) are essentially scientific, as are also verbs in -ate. Most verbs are denominal, analysable as ‘deprive of, rid of, rid of the character of...’. At the same time, these verbs are also, often more naturally so, analysable as counterparts of unprefixed verbs and then come to mean ‘reverse, undo (what is denoted by the verb)’. Some verbs admit of the latter analysis only, as demobilize, decentralize, devalorize, decivilize. In this way, we often have a development toward this reversative-deverbal pattern of interpretation, witnessed by such coinings as deobstruct 1653, decompose 1751 (infl. by F décomposer), deconsecrate 1867, decompress 1911, though perhaps better analysed as a denominal verb ‘relieve from compression’, deregister ‘reverse the registering’ 1924, decontaminate 1937. The recent words desegregate and desegregation, both probably not older than the decision of the U.S. Supreme Court in 1954 about desegregated schools (the words are not found in dictionaries), are based on the same semantic pattern. The only rival in this function is dis- (as in disconnect ~ connect); reversative un- is chiefly used with everyday words without a learned tinge (as in undo ~ do). However, the productivity of this rival dis- seems to have been decreasing for some time back. Of the few words coined in the last 100 years, only the recent word disassemble is in common use (see dis-). This development would favor the development of de- in the pattern segregate ~ desegregate, a course prepared by the existence of so many verbs in -ize analysable in the same manner.

3.15.5. We now come to the pattern delouse ‘remove (what is denoted by the noun) from’. A Middle English loan such as deplume (representing MFr déplumer) 1420 was probably analysable to speakers as ‘deprive of plumes, feathers’, and French déchiffrer was recognized to be based on the same semantic pattern, as it was adapted as decipher 1528. The type was imitated, at least tentatively. Departure 1586 is early recorded with the meaning ‘deprive of
pasture'. *Depasture* 'pasture' may simply represent Latin *depascere*. *Dethrone* 1609 also follows the privative denominal pattern, even though it may in the main be F *dêtrôner*. There are other tentative coinages such as *dehusk* 'deprive of husks' 1566 (marked obsolete in OED, but listed in Webster), *detomb* 1607, *detruth* 1647, *demast* 1666, *depark* 1700, *delawn* 'deprive (a bishop) of his lawn, i.e. his office' 1726, *debar* 'strip of its bark' 1744, *defoliage* 1831, *deflesh* 1837. With the exception of *decipher*, *dethrone*, however, none of the preceding words has gained currency.

3.15.6. For the last hundred years, there have again been quite a number of coinages, and in recent years the derivative pattern has become firmly established, though many words are purely technical. The pattern probably would not have prevailed on the merits of the above mentioned verbs, as we have seen that those were never common property of the language. It was certainly the growth of the type *de-militarize* expressing the same concept 'remove the (what is denoted by the noun)', that helped promote the type *de-louse*. It is worth noting that early coinages after this pattern are all matched by Latinizing verbs in *-ize*, partly *-ate*. Cf. *decolor* 1832, *decolorize* 1836, *decolorate* 1846; *desilver* 1864, *desilverize* 1872; *desulphur* 1874, *desulphurate* 1757, *desulphurize* 1864. The non-suffixal type of derivation grows, especially with verbs denoting technical processes. It is illustrated by coinages like *depolish* 1873, *denature* 'alter the nature of (coffee, tea, alcohol)' 1878, *deglycerin* 1885, *degum* 'free (silk) from sericin' 1887, *dehorn* (cattle esp. by destroying the ends of the horns with caustic potash) 1888, *dehair* 'remove hair or wool from hides or skins' 1909, *delint* 'remove lint from' 1902, *detin* 1909, *defat*, *dewater* 1923. Webster lists *debar*, *degerm*, *degrease*, *dehull*, *dehusk*, *degas*, *derat*, *dewax*. While these are technical jargon, others have wider currency, as *decode* (after *decipher*) 1896, *defrost* 1895, *deice* rec., *devalue* 1918, *decontrol* 1919 (especially said of the removal of government control), *delouse* 1919, *deflea* rec., *debunk* 1927, *debeef* 'reduce the weight of a p.' rec. AE. That the pattern is alive, is proved by such possibilities as *detassel* (Webster), *dehandle* OED 1893, *deball* (The Reader's Digest 1944, 10. 98), *debulk* (MeAL^4, 194 and Spl. 394—399). With other words it is difficult to tell what their status is, as *derate* 'diminish the burden of rates, i.e. local taxes' BE 1928, *deskill* 'deprive of skilled labor' 1941, *destool* (obviously a nonce word, meaning 'deprive (an African chief) of his 'stool', and coined after *dethrone*), *deforest* 'strip of forests' 1880. *Declutch* 'disengage a clutch' 1905 is listed in OED and Webster, but the verb is not recognized, at least not in American English (*release the clutch* is the common expression).

3.15.7. Derivatives from substantives denoting vehicles have the meaning 'cause to' descend from, leave...'; as *decart* 1860, *detrain* 1881, *debus* 1915, *deplane* 1923, *detrick* c. 1940 (of which we find satirical American English imitations like *deomnibus*, *dehack*, *dehorsecar*, *decanalboat* quoted by Mencken in AL^4, Spl. I. 399).

3.15.8. *Un-, de-, and dis-* all form verbs expressing negative ideas and are therefore rivals. Their respective derivative relevancy may be defined partly in terms of the formal and semantic patterns in which they are used, partly in
terms of their range of usage. We will consider the three concepts of negativity, reversativity, and privativity and see what the distribution of the types is.

Negativity

In this sense group, dis-agree is the only existing type. There are no rival formations with either un- or de-.

Reversativity

Dis- as in dis-join combines with verbs of Romance origin only and seems to be losing ground to the type de-segregate. This latter type, deriving verbs from Latin and Romance verbs, is more recent and has only started developing. Verbs in -ize and -ify combine with de-, so the relevant types are de-centralize, de-electrify. Verbs of the type dis-en-tangle are unrivalled.

All everyday simple verbs are made reversative by means of un-. Therefore, un-do is the strongest type of the reversative group.

Privativity

Dis- as in dis-bar combines with Romance bases only. The prevailing concept is ‘put out of, drive out of, expel from . . .’.

Un- as in un-cage enters into combinations with both native and foreign bases. The chief semantic pattern is ‘release, loose from (the fetters, confinement, restraint of) . . .’.

Verbs of the type de-frost have an essentially technical connotation. They are based on the concept ‘remove, extract (by some process) the . . . from’. The three preceding types, as far as the characteristic sense groups are concerned, are illustrated by the phrases disbar a lawyer, uncage a bird, defrost an icebox.

Parasynthetic denominal verbs in -ize, -ify, and -ate take the prefix de-. The relevant patterns are de-Stalinize, de-nazify, de-articulate.

3.15.9. Baugh’s (224—225) presentation of the facts concerning the negative prefixes un- and dis- (de- is not treated in his book) needs qualification. His remarks on the productivity of un- (“such life as it still enjoys”, “the productive power which (un-) once enjoyed”) and dis- (which Baugh maintains has greatly replaced un-) can hardly be upheld in the face of so much contrary evidence.

3.15.10. De- has formed a few substantives with the meaning ‘loss, lack, removal of . . .’, as denutrition 1876 (a medical term, the opposite of nutrition), deactivation ‘loss of radioactivity’ 1904, decompression 1906, decontrol 1919, deemphasis (not in OED or SpL), demerger rec.

3.16. demi- /ˈdemɪ/ occurs in obs which are either loans from French, translations of French words or technical terms in spheres whose phraseology is French, i.e. anglicized French, by tradition. The meaning of the prf is ‘half’. There are only a few words which are more or less in general usage, as demi-god (= F demi-dieu) 1530, demi-rep (rep for reputable which had the sense “respectable” in the
18th c.) 1749, demi-season (= F demi-saison) 1796, demi-bath (= F demi-bain) 1847. Demi-monde, demi-mondaine, demi-tasse are French in form also. In demi-semi 1805 we have a jocularly depreciative adj made up of two prfs with the meaning 'half'. The word must be considered a cpd. Demijohn is F dame-jeanne.

The prf is occasionally in use with ordinary class nouns, often implying depreciation, as in demi-atheist, -doctor, -gentleman, -Christian, -king, -lawyer.

In spheres where the terminology is anglicized French by tradition or where French leadership is acknowledged, demi- forms numerous technical words. There are terms of heraldry (demi-voil, demi-lion etc. etc.), beg. with the 15th c., old names of armors, 16th c. and later (demi-brassard, demi-cuirass), of arms (demi-cannon, demi-culverin, both obs., demi-lance), of fortification (demi-bastion, demi-gorge, demi-lune), antiquated terms denoting costumes (demi-robe, demi-train, demi-toilet etc.), old names of weights, measures and coins, beginning about 1500 (demi-barrel, demi-farthing). Various other words have been coined (for an exhaustive treatment see OED), but except for the old-established groups, half- and semi- (the latter, for instance in music and botany), partly also hemi- have replaced demi-cbs.

3. 17. di- /daɪ/

represents the OGr prf di- with the basic meaning 'two'. It forms scientific words only, chiefly terms of botany, zoology, mineralogy, coined on a Greek basis and partly adaptations of NL words. We have only adjs, coined as bahuvrihi or extended bahuvrihi cpds, as di-dactyl 'having two fingers' or di-cephalous 'having two heads'. Obs occur from about 1700 on, but most of them date from the 19th c. A few examples are di-arch, digastric, dipetalous, dihedral, dipnemonous, dipolar, diphyllous.

The prf is used in terms of chemistry to denote the presence of two atoms, radicals, groups etc. In contradistinction to the preceding group, di- forms sbs as well as adjs on a native basis, all 19th c. or younger. Examples of sbs are di-acetate, di-allyl, diamide, diamyl, dichloride, dicyanide, di-iodide, dimethyl, di-oxide, di-phenyl.

Adjs are di-acid 'capable of combining with two acid radicals', di-basic, dicalcic, dicarbon, digallic, dichromate.

3. 18. 1. dis- /diːs/

The question of how prefix combinations with dis- originated has never been asked. It is not raised by either Jespersen (MEG VI. 28. 5), Koziol (§§ 329—334, pp. 115—116), or OED. The last (s.v. dis-) states that dis- is the Latinized form of Old French des- which was the popular phonetic development of Latin dis-, at the same time pointing out that des- became de- before a consonant during the Old French period. It does not seem to notice that the -s form in English then calls for an explanation. Grammarians are all agreed that gradually preconsonantal [s] became mute in the course of the eleventh, twelfth, and thirteenth centuries, early before voiced sounds (which accounts for s-less E aim, blame, male, dine, isle etc.), later before voiceless consonants
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(which explains the [s] in E *mister, feast, haste, taste, beast etc.*\(^1\)). However, the special position of *des-* should not be overlooked: it is a morpheme and therefore liable to persevere longer than a preconsonantal [s] in one of the above monomorphemic words. We may point out, for instance, that in English the phonetic form of *-dis* in derivative syntagmas is always *[dis]* while in monomorphemic words the [s] becomes [z] according to the phonetic environment: *dis-armament* as against *disaster*. The Old French words and their introduction into Middle English offer a somewhat confusing picture. That [s] had become mute by and large seems to be proved by the spelling variants both in French and English; usually forms with *de-*, *des-*, *dis-* occur side by side. Of OE *de*-forms, the *s-* less form appears in English with *deface* c 1325, *defeat* c 1374 (no *des-* or *dis-* is recorded in OED), *decrease* 1382 (early practice prefers *dis-* however), *deflower* 1382, *deform* 1400, *deplume* 1420 (in part influenced by Latin verbs, as *deformare, ML deplumare, deflorare*), while the *des-* form has prevailed in *dismember* 1297, *disdain* (as a vb 1290, with *de-* being the only form till about 1380 while the vb is not recorded before about 1380, with both *de-* and *dis-* equally common for some time), *discover* 1300, *discharge* 1300, *displease* 13... , *disguise* c 1325 (we have rival *de-* forms also in the 14th c.), *disfigure* 1374.

3. 18. 2. It would thus appear that in the early loans of the 14th c. *s-* forms were still more frequent. The number of *des-* forms was greatly increased by loans of French verbs whose radical began with a vowel. To the present day, *des-* has remained the antevocalic allomorph of preconsonantal *dé-, so the [s] never became mute in verbs such as OF *desacorder, desalouer, desavoyer, desobeir*. To this group belong *dishonor* 1300, *disarm* 1374, *disallow* 1377, *disavow* 1393, *disobey* 1393, *disaccord* 1400. These phonetic circumstances then seem to account for the form *des-*. The form of the prefix was subsequently changed to *dis-*. This may be due to Latinizing influence, but it may also in part be attributable to the influence of the prefix *mis-* which combined the strong OE prefix *mis-* (as in *misbelieve*) and less frequent OF *mes-* (as in *mescreant, meschief*); loans from Old French were all adjusted to the form *mis-*. The form *dis-* is definitely established by the 15th century.

3. 18. 3. Deverbal loans are *disallow* 1377, *disavow* 1393, *disobey* 1393, *disaccord* 1400 (representing OF *desalouer, desavoyer, desobeir, desacorder* respectively), all analysable as *refuse to, fail to, not...*. An early English coining is *distrust*, recorded 1430 (Lydgate). However, no other examples of the use of this word occur before 1548, nor do we find any other coinage with a non-Romanic basis before the 16th century. This seems to indicate that *distrust* was probably not early in common use. Latin *diffidere* may have served as a pattern, as OED supposes. Later are recorded *disapprove* 1481, *discommend* \(^2\)

1494, disagree 1494, disaffirm 1531, disfavor 1533, disclaim 1560, dislike 1594, disesteem 1594, disacknowledge 1598, disrespect 1614, disadvise 1636, disbelieve 1644, dissatisfy 1666. Though it is basically the concept of contradictory opposition that is expressed ('not . . .'), contrary opposition is often implied, as in disrelish 'dislike' 1543, disimprove 'render worse' 1642, disregard 1641 (esp. in earlier use), disremember 'forget' 1815, disown 'refuse to acknowledge as one's own; repudiate, disclaim' 1649.

In a few cases, the prefix conveys the meaning 'cease to . . .', as in disuse (chiefly in the form disused, though) 1457, discontinue 1479.

3.18.4. Reversal, undoing of the verbal action was implied in the loans dishonor 1300, disarm 1314, disclose, orig. 'unclose, unfold' 1393. It is difficult to tell whether verbs found before 1500 are anything but loans. Of disarray 1470, disjoin 1483, discouple 1489, disannex 1495, dispossess 1494, decompose 1483, decompose is the only verb for which no French pattern appears to be recorded. For disinherit 1450 (from inherit with the now obsolete meaning 'make heir') no pattern has been found, either, but it doubtless existed in Anglo-French legal terminology. It is probably safe to assume that by about 1500 the reversative pattern had become established in English.

After 1500 are recorded disappear 1530, disanimate 1538, dismount 1544, dishallow 1552, disunite 1560, discrown 1586, disestablish 1598, disinfect 1598, dishearten 1599, disassociate 1603, discanonicalize 1605, dislink 1610, disannoint 1648, disqualify 1718, disarrange 1744, disconnect 1770, disorganize 1793, disintegrate 1796, disharmonize 1801, dishabituate 1868, disassemble (machinery, a watch) 1922.

3.18.5. There are in particular many verbs beginning with en- (em-, in-, im-), either as a prefix (e.g. en-tangle, im-prison) or as an unanalysable constituent (e.g. endow, inter). This more recent pattern is likewise due to French where the type désenchanter has been very productive. Around 1600 we find the first loans, such as disenchant 1586, disencumber 1598, disenamour 1598, disinter 1611, disengage 1611 (F désenchanter, désencombrer, obs. désenamourer, désenterrer, désengager respectively). But the type was obviously not felt to be different from the reversative type in general, as we have early coinages, even with a non-Romance basis such as disentangle 1598. Other exs are disembowel 1603, disembellish 1611, disenthrone 1608, disimprison 1611, disimmure 1611, disembroid 1622, disentomb 1626, disenthral 1643, disenfranchise 1645, disentitle 1654, disentrance 1663, disenfranchise 1664, disembodily 1714, disembarrass 1726, disembosom 1742, disentwine 1814, disentail (legal term) 1848, disembower 1856, disendow 1861, disenmesh 1868, disentrammel 1866, disembled 1885.

3.18.6. Several loans from French were denominal verbs, analysable as 'remove, deprive of, rid of (what is denoted by the nominal basis)', in some cases as 'remove from . . .'. Examples are dismember 1297, dishonor c 1300, discharge 'relieve of a charge' c 1330, disarm 1314, disfigure 'deprive of its figure, form, shape' 1374, disjoint 'put out of joint' 1420 (though originally derived from the participial adjective disjoint = OF desjoint), dislodge 1450, disanchor 1470, discharm 'undo a charm' 1480, discourage 1481 (later followed by the English coinages dishhearten 1599, as opposed to hearten, and dispirit
1647). By the second half of the 15th c. this derivative pattern appears to have been established in English, and numerous words have been formed. The chief semantic pattern is 'deprive of, deprive of the character, rank, privileges of...'; on which were coined disfranchise 1467, obs. dismerit 1484, distune 1484, discommon 1478 = discommune 1590, dispark 1542 'deprive of the character of a park', obs. disapparel 1580, disburden 1531, dishorn 1558, discountenance 1580, disceptre 1591, dispost 1577, disbranch 1575, disrank 1599, disquantity 1605, disedge 'blunt' 1611, discloak 1600, disinterest 1612, disabuse 1611, disprivilege 1617, disgarland 1616, disflesh 1620, dispawper 'depr. of the privil. of a p.' 1631, dislimb 1662, disfeature 'mar the feature' 1659 (after disfigure ME which is OF desfigurer), disbud 1725, diswarren 1727, disgown 1734, dismast 1747, disrate 1811, disfellowship 1831, disfrock 1837, disillum 1855, dishorse 1859, discommons 'deprive of commons in a college' 1852, not to mention rarer words such as disjen, disfever, disflesh, disforest, disleaf, diswig, diswindow, diswing, diswood, all recorded as main entries in OED.

The concept 'remove from, put out of...' underlies verbs such as dislodge (= OF desloger) 1450, displace 1551, dishouse 1588, discase 1596, disparish 1593, disorb 1606, disbench 1607, disbar 1631, discage 1649, dischurch 1651.

Of these numerous coinages (which represent only part of the words OED lists), however, there are not too many that have general currency, and among them verbs derived from a non-Romance word are exceptional. In common use are disarm, discharge, discourage, which attracted dishearten, dispirit, disabuse, disilluision, dislodge, disbar, disfranchise, disfigure. It is worth noting, however, that disfigure, dislodge are no longer connected with their nominal bases. Disinterested is common only as a participial adjective. With the exception of dishearten, which was coined after discourage, there is no derivative from a non-Romance word that is commonly used. The privative pattern with native substantives is the type un-burden. We have seen the same tendency with the other types.

3.18.7. Dis- does not in general combine with non-Romance elements. In the group based on the concept 'not, fail to...', the only words in common use are disbelieve, distrust, disown, and dislike. It should be noted that this semantic pattern is unrivalled by de- or un- combinations. Likewise unrivalled are verbs beginning with disen- (disem-) so that, here again, we find a few current verbs derived from a non-Romance radical: disentangle, disenharine, and disembody (cf. 3.15.6). The prefix is redundantly intensifying in disgruntled (f. obs. grumble) 1682 and the uncommon verbs disannul 1494 and dissuender 1680.

3.18.8. Dis- is a nominal prefix, too, combining with adjs and sbs of Romance origin. In nominal combinations, it expresses the concept of negativity, converting the meaning of the underlying noun into its contrary or contradictory opposite. A strict line between the two aspects of negativity cannot be drawn. The derivational patterns are French: OF des-loyal 'not...' or 'the reverse of...', OF des-comfort 'lack of...' or 'the reverse of...'.

English borrowed many adjs from French in which the prf conveyed the nuance of either contrary or contradictory opposition, as in dishonest 1386,
disobedient 14... discomfortable 1413, disnatural 1430, disloyal 1477. The pattern led to such coinages as discontent 1494, dispassionate 1594, courteous 1578, disquiet 1587, disadvantageous 1603, dissimilar 1621, disaffected 'dis-loyal' 1632, disingenuous 1655, disharmonious 1659, discontinuous 1667, dis-remote 1677, disuniform 1687, disreputable 1772, disrespectful 1813, dis-approbative 1824, dis-symmetric 1867.

The sense 'absence, lack of...' underlies the loans disease 'lack of ease' 1330—1623, discomfort 1375, discontinuance 1398, distrust 1513, discommodity 1513, disuse 1552, disproportion 1555, discredit 1565, discontinuity 1570, disability 1580, disharmony 1602, disaffection 1605, disfellowship 'exclusion from f.' 1608, discontinuation 1611, disunity 1632, disregard 1665, dispassion 1692, dis-peace 1825, dis-suitability 1879.

The shade of contrary opposition ('the reverse of...') primarily underlies the loans dishonor 1300, disobedience 1400, displeasure 1470, disloyalty 1481, disagree 1495. Formed on the pattern are disorder 1530, disadvantage 1530 H, disfavor 1533, discourtesy 1555, dislike 1577, attracting distaste 1598, disservice 1599, disunion 1598, disconformity 1602, disesteem 1603, disaffirmance 1610, disapproval 1622, dis-relish 1625, disapprobation 1647, disbelief 1672, disinclination 1647, disaccord 1809, disassimilation (physiological term 'reversal of assimilation') 1880.

It will be noted that several of the preceding examples can also be analysed as suffixal derivatives from dis- combinations, as disagreement (disagree), disloyalty (disloyal), disobedience (disobedient), discontinuance, discontinuation (dis-continue), disapproval (disapprove) and others. There is no doubt about disagreeable which in its original sense 'disagreeing, discordant' 1400 is derivationally connected with disagree vb; the meaning 'unpleasant' is not recorded before 1698.

3.18.9. Dis- combines only with Romance adjs, chiefly such as have a learned or academic tinge. In productivity it cannot compete with un- which is far more common with words of general currency. Though adjs like discomfortable, dissatisfactory, dissocial exist, the commonly used words are uncomfortable, unsatisfactory, unsocial. As far as prefixal derivation is concerned, these are the counterparts of the unprefixad adjs.

Dis- is equally unusual with non-Romance substantives. The three that are common are nominal derivatives from the verbs which we have already mentioned (3.18.7): distrust 1513, dislike 1577, and disbelief 1672.

3.19.1. en-, em- /en, in; em, im/

originated in ME loans from French. The retention of the level [e] before nasal consonants as against central Old French pronunciation [an] is a regular feature of Anglo-Norman (see Pope op. cit. footnote 63a, §§ 1084 and 1088). For the allomorphs [im, in] see below 3.19.6. The various English types of coining were all in existence in French which had itself inherited them from Latin. The types are encage 'put into a cage' / encrown 'put a crown on a p. or th.', enslave/enfeeble 'make (into)...', enwrap 'wrap up'. Before 1450 there are few Ec, the majority of words occurring are loans from French, as enamor, enchain, encircler, enchain, encourtain, endamage, enfeoff, enfeeble, engross, enrich. Many have died out, as enarm, enflake, enoil, encharge 'hunt' a.o.

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3.19.2. Type encage 'put in . . .'

In many French words the meaning 'put in . . .' was easily abstracted, as in enamor, enchain, encharge, obs. enarm. Others could be analysed as 'affect, cover or the like with . . .' or 'put a . . . on a p. or th.' as ename, encharm, endamage/enorun, enchain. The two shades are not always clearly separable, but the first one is greatly predominant. Early Ec are embow 'bend into a bow' 1400, embless 'make happy' c 1430, obs. embrace 'fix with a brace' 1475, endanger 1477, encrown 1486, obs. embull 'publish in a bull' 1480, enhungered 1480. The most productive period was the 16th c. which formed emball, embay, emblazon, o. embloom, embody, o. emborder, embosom, embower, o. enage, encage, encamp, o. enchrochonic, encipher, o. encloister, encload, encofin, encompas, encradle, endungeon, enflesh, enflower, enfold, engarland, engulf; o. enharbor, o. enhazard, o. enkennel, o. enrail, ensheath, enshroud, enshrine, o. ensnarl, ensnare, entomb, entrench, entrap, o. envaunt, envail. From the 17th c., chiefly the first half, are recorded embank, o. embeam, o. embillow, o. embladder (1662), embaze, embog, embos, embrangle (1664), encase, o. encurch (1681), encolor, encurl, enfetter, o. enforest, enfrenzy (1656), englobe, engrace, enhearsee, enheaven (1652), enjail, enjewel, enlist (1698), ensoul, ensphere, enstamp, enwreathe. Later came embale 1727, embd 1778, emblossem 1766, enfever 1799, enencapsul 1877 (Phys.), encash 'convert into cash' 1861 (= F encaiser), encyst 1845, enhalo 1842, engroove 1842, enrupture 1740, ensepulchre 1820, enregement 1831, enframe 1848, enface (after endure) 1861, entrain 1881 (orig. a British Army term like its opposite detrain 1881), embus 1915, emplane 1923.

The original and dominant sense is 'put into . . .'. But we have occasionally transitive uses with the meaning 'put oneself into, enter . . .', as in embark 1580 H, obs. embreach 1581, enlist 1776 H, enroll (not mentioned in this use in OED or Spl.), embus 1915, emplane rec.

3.19.3. Type enslave 'make into . . .', type enfeebble 'make . . .'.

Only the deadjectival type has an old French pattern underlying the English loans embellish, o. emblanch, enable, o. enjeelish, engross, enlarge, enrich. Ec are o. enhardy 1483, endark, ennoble 1502, o. enclair 1509, o. embase 1551, endear 1580, embrave 1579, o. embriug 1598, enrough 1601, embitter 1603, o. enhappy 1626, o. embarren 1627, embrown 1667, encrimson 1773, endenizen 1592, enthral 1576, o. envassal 1605, enslave 1643, o. enaptive 1592.

3.19.4. As there were unprefixed vbs derived from sbs or adjs alongside of such with the sf -en (black/blacken, length/lengthen), our prf came to be tacked on to suffixed vbs (all between 1500 and 1650): embrighten, embolden, encolden, enliven, enharden, enharden; obs. are enlengthen, enstrengthen, enquicken, ensweeten, enwiden.

3.19.5. Type enwrap 'wrap in, wrap up'.

French had also non-denominal prefixed vbs (as a continuation of L type invadere) and English borrowed vbs such as enclose, enroll, encounter which gave rise to Ec based on the type. The tendency was, however, obviously
strengthened by the resemblance en- bore to native in-. The earliest words found are enlighten and enwrap (both 1382, in Wyclif), occurring as enwrappid ptc., inwrappyde pret. and inligtened (which may be a suffixal derivative from OE inlīhtan). In the 15th c. there followed the now obs. vbs embraid ‘upbraid’ 1481 and enbraid ‘plait’ 1491. Other coinages are 16th c. and later. The prf adds a slightly intensifying nuance, if any, to the simple vb. Examples are encover 1520, embraze 1522 ‘render famous’, engird 1566, enkindle 1548, enlink 1560, enclaspe 1596, engrasp 1593, entwine 1597, entrust 1602, embind 1628, encheer 1605, encolor 1648, enclothe 1832, enwind 1850.

Of the types discussed, encage has been the strongest, and it is the only one still productive.

3. 19. 6. We have already pointed out that so long ago as ME the prf em-, en- was felt to be connected or identical with native in-. As early as the 14th c. we have by-forms in-, im- to most en-, em- vbs. The practice is still in existence though in many cases one of the forms is either obsolete or otherwise differentiated (as the pairs inquire/enquire, indorse/endorse, insure/ensure). With breathe three forms exist: embreathe, inbreathe and imbreathe—imbreathe being the oldest (14th c.). The coining is obviously influenced by L inspirare. And this is how a third element comes in. Latin had all the types English inherited from French, and it is practically impossible to tell whether in this or that word the prf is Latin or native in- though in learned words the prf can safely be considered as Latin. With en-, em- the pronunciation is still often [en, em], but its allomorphs are [in, im]. Semantically there is but one prf, in which three different elements are combined, though in one or the other case this or that element is felt to be predominant. As most vbs have or have had both en-, in- resp. em-,im-, I give only such words here for which no counterparts in en-, em- appear to have been coined: imburse 1530 (now rare, repr. LL imbursare), impack “pack in” 1590 (rare), immingle 1606, inspirit 1610, impalace 1611, imbark “enclose in bark” (as different from embark “go on board”) 1647, impalsy ‘affect with p.’ 1750, impersonify 1804, impave “pave in” 1830 (rare).

Obsolete in-, im- spellings are now imposer, impoison, incamp, incompass, inlist, inclaspe, infranchise, ingender, inglobe, inlute, inhearse, inleague, inroll a.o. Obsolete en-, em- spellings are enestate, envigor, empledge, empassion a.o. But as the tendency to spell en-, em- is predominant, the number of obsolete forms of this group is smaller. The prf is unstressed.

3. 20. epi- /'epi/

was a prefix in Old Greek with both deverbal and denominal derivatives. In its latter function it has been used in Neo-Latin scientific phraseology. Hence its use in English where it forms words on an OGr resp. NL basis. Before a vowel it becomes [ep-], but contrary to OGr usage, it is preserved before [h]. The respective OGr types are epigastrios ‘situated on or over (the stomach)’, epigastrion ‘the part situated over the stomach’. The words are chiefly terms of anatomy and biology; a few belong to geology. In the main, they are 19th c. or later words. Examples are epaxial, epibasal, epicentral, epifocal, epicerebral, epiclinal, epichordal, epicranial, epidendral,
epidermatous, epiphyal, epigynous etc. / epiblast, epicalyx, epidermis, epiglottis, epiphragm, episperm, episternum, epithelium etc.

In modern chemistry the prf is "employed in the names epibromhydrin, epichlorhydrin . . . denoting substances of analogous composition belonging respectively to the bromhydrin, chlorhydrin . . . series" (OED). In mineralogy epi- "is prefixed to the names of certain minerals to form names of other minerals closely resembling them in composition, as in Epiboulangerite, a sulph-antimonide of lead resulting from the decomposition of boulangerite" (OED).

3.21. ex- /eks/

The prf goes back to Late and Medieval Latin usage in words such as ex-patricius 'ex-patrician', ex-consul 'ex-consul'. Imitation of this usage begins rather late in English (as it does in German and French), app. not before the end of the 18th c. Exconsul 1398, ex-consular 1683 are adapted Latin. E.g. are ex-bishop 1793, ex-mayor 1796, ex-ambassador 1805, ex-courtier 1506. More recent are ex-emperor, -empress, -king, -commander, -president, -professor, -proprietor, -secretary, -husband, -wife. -Army officer, -Navy lieutenant, -service man, -Freedom Fighter (Times Weekly 3.688. 20).

With adjs, the prf has not become successful. 19th c. words such as ex-Russian, ex-learned, ex-Liberal, ex-boarded out (q. in OED) do not represent common usage. In the ex-rich (A. Huxley, Point Counter Point 540) the adj is used as a primary.

In scientific terminology words have been coined on a Neo-Latin basis. The types are exsanguis (CL) and excaudatus (LL). The meaning of these parasynthetic adjs is 'deprived of, void of . . .'. Examples are exalbuminous, excuate, exarticulate, exappendiculate, exstipulate.

On the semantic basis 'outside . . .' are formed exterritorial 1880, excentral 1847, exorbital 1876, exinguinal 1884. There is no Classical Latin type for them, they are even outsiders in English, extra- being the normal prf for words on this notional basis.

3.22.1. extra- /'ekstro/ 

forms parasynthetic adjs on a Latin basis of coining. The type is extra-mundane, the meaning 'outside, outside the scope of . . .'. CL is extra-ordinarius, LL are extramundanus, extramuratus 'extramural', extranaturalis (Tertullianus), ML extraprovincialis a.o. The starting-point for Ec seems to be extraordinary 1460 which was orig. used with the meaning 'out of the usual order', as opposed to ordinary. Later come extra-decretal 1563/87, -judicial 1630, -legal 1644, -regular 1649, -essential 1652, -parochial 1674/81, -lineal 1691, -uterine 1709, -Britannic 1770, -urban 1773, -tabular 1780, -jugal 1782, -tropical 1783, -professional 1799. Most of the coinages, however, which are in use today, date from the 19th c., as extra-alimentary, -carpal, -cerebral, -cor- poreal, -curricular, -embryonic, -governmental, -historic, -marital, -parental, -sacredotal, -scriptural, -territorial, -spectral, -orbital, -stomachal, -vaginal, -visceral, -vascular.

Coinings on a native basis are exceptional: extra-hundredal, extra-red (= infra-red).
3.22.2. Type extra strong.

The OED suggests that extra is short for extraordinary. As a matter of fact, extraordinary could be used as an adverb in the 17th c. (extraordinary expensive, extraordinary good etc.). One inconvenience with this explanation is that the last quotation for this usage is from 1778 while the first quotation for extra, extra-special, is from 1823. A greater inconvenience is the fact that the use in question started with trade designsations of size, as extra elephant folio, extra foolscap (1811) which can not be explained as *extraordinary elephant folio etc. I would propose another explanation. I think the type is exactly parallel to anti-court party. The semantic nuance ‘beyond, more than …’ needed is that of extra-natural 1794 for which the OED has the quotation extra-natural statesman, i.e. one whose qualities are beyond the natural. Obs such as extra foolscap size, extra elephant folio would in most of all cases naturally be shortened into extra foolscap, extra elephant. From the use of extra with predjunctal sbs developed sbs with adjs. While there was first only a late ‘special edition’ (of newspapers), a second, extra-special one was added. Later the type was extended to other adjs, as in extra strong, extra fine, extra dry, extra condensed. But usage has kept to its sphere of origin, i.e. trade designsations.

Extra as an adj (extra pay, extra fees, extra work etc.) is merely a clipping of extraordinary which, in the sense of ‘additional’ has been traced to 1585 by the OED. The first quotation for adj extra in the OED is from 1776.

3.23.1. fore-/for, for, fo/

is by origin a locative particle with the meaning ‘before’, with respect to place as well as time.

With vbs it had become, as early as OE, an inseparable prf. We have a few vbs from this oldest period, both with locative and temporal meaning. To the locative group belong forerun, forego ‘precede’, forelie, foregird and some other archaic vbs, to the temporal one foresee, foresay, forethink, obs. forewit (wit ‘know’), all meaning ‘… beforehand’. The locative group was practically dead in ME. In the temporal group there have been coinings down to the 17th c., but most of them have an archaic ring now. ME are forecast, fordestine, foreguess, forelook, foreordain, forespeak, foretell, forewarn, obs. forechoose. 15th c. are foreknow and foretaste. Newer coinings are chiefly from the 16th c., as foreappoint, forearm, foreconceive, foredoom, forefeel, forehear, foreintend, forejudge, forelive, foremention, foreshadow, foreshow, foresignify. From the 17th c. date forebode 1603, foreact 1618, fore-reach 1644. Many 16th c. words are extinct today.

3.23.2. Nominal obs likewise go back to OE. In the purely nominal words the prf has adjunctal functions. The strongest group is that represented by the type forefinger. Many of the words are technical terms, and of these most are nautical. The meaning of the prf is ‘situated in front, front’. OE are forehead, forelock ‘hair at the front part’, foretooth, foreship. ME are forecastle, fore-end, forepart, foreside, foarestay, foreland ‘promontory’, obs. forestage ‘forecastle’, foreman, foresleeve, foretop (of the head). From the 15th c. are recorded forefinger, forefoot, foreleg, forefront, forehorse, forelock, foresail (naut.); from the
16th c. forename, foreskin ‘prepuce’, forecourt, foregate, obs. forefence ‘front defence, bulwark’, forehand (hand in various technical senses), foremast, obs. foredeck. 17th c. are the naut. terms forepeak, foreyard, foreshot, foretack / foreground, fore-edge ‘front edge of a book’. From the 18th c. we get forearm, forepiece, forewoman, foreshore, from the 19th c. foreword, forestick U.S., and the naut. terms forecabin, forebody, forehook.

With the temporal nuance ‘preceding’, previous, preliminary’ are formed obs. forespeech OE ‘introductory speech’, forefather, foreelders ME, forenoon in o. sense ‘previous night’ 1513, foremother 1552, forepurpose ‘p. settled beforehand’ 1551, foregame 1594, forertime 1640 ‘past’.

3. 23. 3. Deverbal sbs have meanings explained from their corresponding vbs, as forebode OE, forelook, foreshot, foretaste, forethought, obs. forewit (all ME), foredoom, foreknowledge (16th c.), foreshadow 1831. In all these, foreshadows the idea ‘with reference to the future’.

Agent-sbs are foreganger, forerunner (ME), forerider 1470. Forenoon 1506 is patterned on afternoon, i.e. it is a prepositional group (as the stress on the root indicates; but forestress is also heard).

Verbs have the main stress on the root, nouns on the prefix (with the exception of forenoon).

3. 24. 1. hyper- /'haipa(ə)r/ is found with sbs and adjs and conveys the meaning ‘over, too much, extraordinary (-ily), to excess’. The types are ultimately Old Greek, as hyper-asthenés ‘excessively weak’, hyperagathótes ‘excessive goodness’, hyperthermasia ‘excessive heat’. ML and NL adopted many Greek words and formed new ones from Greek as well as Latin roots. English hyper- words occur as early as LME, but are esp. frequent in the 17th c., the majority being anglicizations of OGr terms of rhetoric, prosody and the like. From about 1600 on, hyper- can be considered an English formative with learned words, chiefly adjs. 17th c. are hyper-angelical, -archepiscopal, -diabolical, -prophetical, -magnetic, -sceptical, -superlative, -physical, -metric etc. The sense is not necessarily the modern one implying excess, hyper- often merely means ‘that which is beyond . . .’, as in hyper-angelical, -physical, -metrical a.o.

3. 24. 2. There seem to be no coinages in the 18th c., but the 19th c. has many. In general words the nuance implied is always that of ‘too much, unduly excessive’ or the like. The majority of new formations are adjs, such as hyper-accurate, -active, -acute, -fastidious, -idealistic, -moral, -neurotic, -obtrusive, -orthodox, -ridiculous, -sentimental. Sbs are chiefly deadjectival derivatives: hyper-activity, -acuteness, -conscientiousness, -conservatism a.o. Occasionally we find vbs such as hyper-emphasize, -realize, -vitalize which are, however, uncommon.

3. 24. 3. The OGr type hyperthermasia, adopted into Latin, is used in medical phraseology, chiefly words of the 19th c. The basis of coinage is Neo-Latin, and many English words are used in NL form which need not be the OGr one. As a matter of fact, many of the modern terms did not exist in OGr,
but others did, in a different form, however (cf. NL and E hyperaemia as against OGr hyperaimosis, for instance). All these words denote some excessive, abnormal bodily condition, as hyper-aesthesia, -kinesia, -metropia, -opia, -ostosis, -piesia, -pituitarism, -plasia, -pnea, -pyrexia, -thyroidism, and many others. From them can be derived adjs, as hyper-aemic, -kinetic etc.

In chemistry, hyper- denotes the highest in a series of oxygen compounds (as in hyperoxide). But in this sense, per- is now preferred.

OGr hyper- was used in various shades of meanings to denote position ('over, above'). In English, this pattern occurs only with terms of ancient Greek and medieval music, and with mathematical and biological terms (for detailed treatment see OED).

3.25. hypo- /'haipo/

is the semantic opposite of hyper-, but lacks its formative range. It forms words on a NL basis of coining from Greek roots (with elision of o before a vowel), chiefly terms of anatomy and zoology. The major type is the adjectival one hypo-dermic 'lying under...'. OGr was rich in such parasynthetic adjs, and NL adopted the type. Ec are all 19th c., as hyparterial, hypaxial, hypo-basal, -branchial, -phyllous, -glossal, -sternal.

In terms of chemistry, hypo- (in contrast with hyper-) indicates a lower state of oxidation, or a low position in a series of compounds. Its use with terms of ancient Greek and medieval music is parallel to that of hyper- (see OED).

Hypo- has not formed adjs of general character parallel to the type hyper-accurate. It does convey the shade 'slightly, somewhat, deficiently', but only in technical terms, as hypo-acid, -active, -alkaline, -toxic. These as well as the terms of chemistry and music are coined on an English basis, i.e. hypo- is the form of the prf before a vowel also.

3.26.1. in- /’in/ 

as a negative prf is used with adjs and sbs of Latin or French origin. To adjs it conveys the meaning 'un-, not', to sbs the meaning 'want, lack, absence of'. Beginning with the 14th c. we have loans from French which are, at the same time, Latin. The form of many words shows, however, that Latin influence has been predominant. 14th and 15th c. are incomprehensible, infirm, infinite, inflexible, inordinate, ineffectual, indiscreet, intolerable, insensible, innumerable, innominable, inescrutable, incombustible, inexpugnable, inhuman / incontinence, ingratitude, injustice, infidelity, in felicity, inconvenience, inability, incredulity, incommodity, inhumanity. About 1500 the prf can be considered an independent formative.

3.26.2. From the 16th c. are recorded inextinguishable, insufferable, inseparate, infrequent, inaccessible, inanimate, infertile, inglorious, inconsequent, inimitable, inhospitable, from the 17th c. intransgressible, inurbane, inofficious, insusceptible, intangible, insecure, insensitive, inexpressible, inexpressive, inharmonic, injudicious, insupposable, insuppressible, insurmountable, inadequate, inadvertent, inalienable, inarticulate, incoherent, inexperienced, from the 18th
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c. inadmissible, incautious, inharmonious, incalculable, irritatable, inorganic, from the 19th c. inaccordant, inextensible, insubmergible, insubmissive, in subordinate, intrascantel, intransferable, inoxidizable, inexplosive, insanitary, inexpansible, to give only a few examples.

Sbs are inconsideration, inhospitality, inexperience, incivility, inclemency, inutility, in consequence (all 16th c.), incoherence, inabstinence, inactivity, inaptitude, incapacity, incompetence, inobservance, inexecution, insobriety (all 17th c.), inaction, inapplication, inattention, incaution, inanimation, inexactitude, indiscipline, inaction, insubordination, inoccupation, intolerance (all 18th c.), incelerity, incivilization, inextension, inorganization, insanitation, irrecognition, irreflection, irrelation.

3.26.3. At all times, in- has been prefixed in accordance with Latin rules, i.e. in- is assimilated to il- before l, to im- before m, b, p, to ir- before r: illegible, illimitable, illoricated, imponderable, immarginate, impennate, irreplaceable, irrebuttable, irreciprocal etc.

3.26.4. The analysis of sbs with an adjectival basis offers difficulties sometimes. While it is easy to tell that insignificance or inopportunity are not the opposites of significance resp. opportunity but suffixal derivatives from insignificant, inopportune, it is doubtful whether inadaptability, inaccurrateness, incompleteness, to mention only a few instances, are prefix formations of adaptability, accurateness, completeness, or suffixal derivatives from inadapt able, inaccurate, incomplete. The truth is probably that they are doubly connected. The stronger tie seems, however, to be the one through the prf as there are many coinages with which suffixal derivation is out of the question. Inhospitality, incelerity, incapacity, insobriety can only be analysed as prefixed sbs. The assertion of the OED that in- is a prf with adjs and their derivatives, rarely with other words, is, however, correct on the whole.

Vbs such as illegalize, immortalize are suffixal derivatives from illegal, immortal.

3.26.5. The prf is not used with words beginning with in-, for reasons of euphony. There are no in- counterparts for uninhabitable, unintelligible etc.

With adjs the stronger rival has been native un- which is ousting in- more and more. In EMoE in- could be prefixed to almost any adj with a Latin or French basis. However, words such as inconscionable, improitable, exchangeable, implesing, impopular, incertain, inchaste, incharitable, inceremonious, incomfortable, inimaginable, intenable, inutterable, inorganical a.o. have given way to un- adjs. The prf in- was formerly also attached to second ptc s, a usage which is now growing obsolete. There are a few of them in PE, as illimited 1602, inconfused 1626, inexhausted 1626, inelaborated 1623, inextended 1739, inedited 1760, whereas 16th and 17th c. English knew incircumcised, incivilized, incompared, incomposed, inconcerned, inconnected, incultivated, indigested, indisputed, unsuspected, incontrolled, indiscussed, inexpected, informed etc. With adjs that are in general use there is likewise a tendency to use un-. Newly coined adjs with in- have a learned, scientific character: insubmergible 1808, innutrient 1822, irremissive 1817, inextensible 1840, insubmissive 1841, irresponsive 1846, intrascantel 1846, insubordinate 1849, intransferable 1859. The 20th c. does not seem to have made use of the prf for new formations.
3.26.6. Some \textit{in-} adjs have by-forms with the prf \textit{un-}. The words \textit{undescribable}, \textit{inelastic}, \textit{unexact}, \textit{unredeemable}, \textit{unreplaceable} are, however, less common than their \textit{in-} counterparts, while \textit{impractical} (termed 'rare' in the OED) is the common American word for British English \textit{unpractical}. On the other hand, \textit{inhuman} means 'brutal' while \textit{unhuman} has the meaning 'not human, superhuman'; \textit{unmoral} merely means 'not moral, non-moral', whereas \textit{immoral} is more or less an equivalent of \textit{licentious}. On the whole, the difference between \textit{in-} and \textit{un-} is that the latter is the regular negative prefix with adjs belonging to the common vocabulary of the language and accordingly stresses more strongly the derivative character of the negativated adj. The prf \textit{in-}, however, can only claim a restricted sphere: it forms learned, chiefly scientific, words and therefore has morphemic value with those speakers only who are acquainted with Latin and French. This restricted formative character of the prefix is even more in evidence with adjs which are not analysable as composites in English (\textit{ineffable}, \textit{inept}, \textit{incult}, \textit{ineradicable} etc.), but are derived on a purely Latin basis.

3.26.7. While with adjs, \textit{in-} is receding before \textit{un-}, the same competition does not exist for sbs where \textit{un-} is much weaker. This explains why alongside of \textit{unequal}, \textit{unable}, \textit{unjust}, \textit{unstable} a.o. (which have replaced words with \textit{in-}) we have the sbs \textit{inequality}, \textit{inability}, \textit{injustice}, \textit{instability} a.o. which have not changed. \textit{Unrecognition} 1869 is as rare as \textit{irrecognition} 1820.

3.27.1. \textit{inter-} /'intə(r)/

is a prf with both verbal and nominal derivatives. Verbal formation partly arose out of loans from OF and is therefore older, whereas the formation of sbs and adjs started in imitation of Latin patterns.

OF \textit{entre-} with vbs had two meanings: it either meant 'between, among, together with' or, with reflexive vbs, expressed the sense of reciprocality. English has not developed this second type, though to a certain extent reciprocality is expressed by English \textit{inter-}, as we shall see. This is not, however, directly influenced by French. The chief group is that of vbs with the basic meaning 'put' to which \textit{inter-} conveys the sense 'do the action between or among things or persons'. The first words occur towards the end of the 14th c., but the majority have been coined since 1500. I should hardly say that the type is entirely due to French, as most of the Ecs were made after a great many Latin \textit{inter-} vbs had been adapted. Loans from French are \textit{interchange} 1374, \textit{intermeddle} c. 1384 (= AF \textit{entremedler} fr. OF \textit{entremesler}), obs. \textit{entermete} 'intermeddle' (= OF \textit{entremetre}) and the 16th c. words \textit{interpose}, obs. \textit{interseam} (= F \textit{entresemer}), \textit{interlard}, \textit{interject}. The popular development of L \textit{inter} in F was \textit{entre}, but as early as the 14th c. French had latinizing forms in \textit{inter-} (as \textit{interposer}, \textit{interjeter} a.o.), and though we have down to about 1600 English words in \textit{enter-}, English had long before followed the Latin pattern \textit{inter-}. Angloized Latin are \textit{interline} ME, \textit{interpone}, \textit{interfuse}, o. \textit{intersert}, \textit{intersperse}, obs. \textit{interlex} (all 16th c.) a.o. It is thus on the combined Latin-French basis that English vbs have been coined. But the prf has from the beginning been attached to both Romance and native roots.
3. 27. 2. With verbs, inter- conveys two shades of meaning: 1) '... between or among other persons or things' (as intermediate) resp. with denominal verbs 'put in ... between etc.' (as interpoint, interleave); 'at intervals' (as intershoot).

2) '... between, among, in, with each other; together; mutually; reciprocally; intimately' (as intermix). The two groups cannot always be kept strictly apart, several vbs (interpenetrate, interstratify, intervein a.o.) enter both groups.

Examples for the first group are intermediate, interflow, interlay, interlope (dial. lope 'leap'), intersow (17th c.), obs. interplace 1548, intershoot, interstratify (19th c.) / interpoint (infl. by L interpungere), obs. interpale 'put in pales' (16th c.), intermine = intervein 'intersect with mines or veins', interfoliate, interleave (17th c.), interpunctuate (19th c.).

The second group is somewhat larger. Loans from French are intermeddle 1384, interchange c. 1374, interlace 1374, intercommon 'associate' 1430, interplead 1587 'litigate with each other'. With the exception of intermingle (1470) no Ecs occur before the 16th c. Examples are interlink, intermix, intermarry, interweave, intercommunicate, interfold, intertangle, interleague (16th c.), interwork, intervisit, interdeal, interpilaster, interlock, interwreathe, interpale (17th.), intercross 1711, interblend, interknit, intertie, interplay, intergrade, interpenetrate, interbreed, interdepend, interrelated, interconnect (19th c.), inter-resist 1902 and other less common vbs. There have been various individual attempts to introduce the prf for the expression of the idea of reciprocity with any verb or noun. S. Daniel (c 1600) and later Coleridge advocated and practised its use (see OED inter- I. 1. b).

Verbs formed with inter- have a poetic, literary, or scientific character. Most verbs occur in participial forms only or as -ing substantives. Of more or less general currency are interlock, intermarry, intermingle, perhaps interdepend and interpenetrate.

3. 27. 3. After the pattern of such Latin words as interamnium, intercolumnium, internodium, interludium, interlunium 'space resp. time between two...' a few learned technical terms have been coined, as interaxis, interpilaster, terms of architecture, interclavicle, a term of anatomy (19th c). Interact 1750 is imitated from F entr'acte.

3. 27. 4. On the relation adjunct/primary there have been coined several technical terms in English, the pt having the meaning 'intermediate, connecting, reciprocal'. Examples are interspace c 1420, the oldest word recorded, formed after interval c 1300 which renders L intervalum, obs. interspeech 1579, rare interlapse, interlight, intermask, interthing (17th c.), interleaf, interline (18th c.), interbrain, intercell, interface, intergrade, interlink, intertie (19th c.), intersex, intertrade (20th c.).

The type is perh. influenced by L interregnum, analysed as 'intermediate reign'. But on the other hand, it was the natural consequence of the parallel types after-effect, by-path, outhouse, overcoat, underwood etc.

3. 27. 5. On the same adjunct/primary relation are based abstract deverbal sbs such as inter-action 'reciprocal action', inter-agreement 'mutual agreement', inter-connection 'mutual c.', inter-dependence 'mutual d.', inter-migration 'reciprocal m.', and the personal sb inter-agent. The type is weak.
The type has also been used with non-deverbal sbs denoting condition, state: *intercommunity* 1587, *intercommunion* 1711, *interculture*, *inter-acquaintanceship*. This group is even weaker.

3. 27. 6. There is an adjectival type with the pt in sense ‘mutually, reciprocally, intimately’, illustrated by such words as *inter-active*, *inter-convertible*, *inter-dependent*, *inter-destructive*, *inter-penetrative* a.o. (all 19th c.). In *inter-mutual* ‘mutual’ the pt is merely intensifying.

3. 27. 7. Another adjectival type, showing the pt in the function of a preposition, has been very productive, esp. in scientific terminology. The pattern is provided by Latin adjs such as *intercaelestis*, *interdigitalis*, *intermuralis* / *intermenstruus* ‘situated or falling between two . . .’. Examples are *inter-alveolar*, *inter-articular*, *inter-brachial*, *inter-branchial*, *inter-cellular*, *inter-clavicular*, *inter-digital*, *inter-muscular*, *inter-nasal*, *inter-nuclear*, *inter-parietal* and numerous others, all from the 19th c. Terms from anatomy and biology form the bulk of these words. A few coinages are older, as *intercostal* 1697, *interlunar* 1598, *interstellar* 1627, *intersidereal* 1656, *intermundane* 1691, *intercrural* 1693, *interscapular* 1721, *interfoliaceous* 1760, *interamnian* 1774, *intervertebral* 1782.

3. 27. 8. The number of adjs expressing the idea ‘happening in the period between two . . .’ is much smaller. Examples are *interconciliary* 1620, *interlunar* 1794 H, *inter-equinoctial* 1795, *intercensal* ‘occ. between two censuses’, *interglacial*, *interministerial*, *intermomentary*, *interparoxysmal*, *intersessional* (19th c.).

3. 27. 9. Another variant is the type *international*, which has proved very productive. The meaning of adjs coined on the pattern is ‘going on between, carried on between, interesting, belonging in common to several . . .’. The type word was coined by Bentham in 1780. Later are *inter-clerical*, *inter-collegiate*, *inter-colonial*, *inter-confessional*, *inter-continental*, *inter-denominational*, *inter-departmental*, *inter-oceanic*, *inter-parliamentary*, *inter-provincial*, *inter-racial*, *inter-regimental*, *inter-territorial*, *inter-tribal*, *inter-urban*, *interzonal*.

When speaking of something that includes several parts (e.g. *empire*) people sometimes use such words as *inter-cranial*, *inter-carpal*, *inter-cerebral*, *inter-imperial*, *inter-Australian* where *intra-* would be the proper pt.

3. 27. 10. Type *inter-state relations*. Unlike the preceding Latin-coined adjs with the pt in prepositional force, these obs with preadjunctal sbs are formed on a native basis, occurring since the 19th c. The type cb is the earliest recorded in *OED*, quoted from about 1845 as American usage. Today the type is widely in use. Examples are *inter-allied policy*, *inter-island airlines*, *inter-school affairs*, *inter-university activities*. Obs with the temporal meaning ‘occurring between . . .’, as *inter-war years*, *inter-battle periods* (q. *Za* 132—133) are not common.

3. 27. 11. The stress pattern is that of middle stress/full stress in vbs, adjs and sbs of type *interaxis*. There is, however, a strong tendency to give the pt full stress with sbs of type *interaxis*. We have the pattern full stress/middle
stress in substantival obs of type interspace, also in other trisyllabic sbs (as interact, intergrowth). Stress is functional to distinguish trisyllabic sbs from their otherwise homophonous vbs, whether there is a derivative relation between sb and vb or not. Examples are interdict sb / interdict vb, interchange sb / interchange vb, intercrop sb / intercrop vb, intercross sb / intercross vb, interflow sb / interflow vb, intergrade sb / intergrade vb, interleaf sb / interleaf, interleave vb, interline sb / interline vb, interlink sb / interlink vb, interlock sb / interlock vb, interplay sb / interplay vb, interspace sb / interspace vb, intertie sb / intertie vb, intertwine sb / intertwine vb, intertwist sb / intertwist vb.

The same distinction holds for other pairs provided the sb is a deverbal derivative, as in intercept sb 1821 fr. intercepi vb 1548, intersect sb 1885 fr. intersect vb 1615, interolve sb 1898 fr. interolve vb 1667, also for the old pair interdict sb 1297 / interdict vb 1290. On the other hand, a vb derived from a sb retains the stress of the sb (see 2.38.7) which explains vb interlude 1608 fr. sb interlude 1303, vb interview 1869 fr. sb interview 1514.

3.28. intra- /'intrə/

forms parasyntthetic adjs on a NL basis of coining. The Latin type is intramuranus ‘situated inside...’. English words with intra- are 19th c. or later, most of them dating from the period after 1850. As extra- words are older, it is possible that they have influenced the rise and growth of intra-counterparts. A large group of words belong to the nomenclature of biology and medicine, as intra-abdominal, -arterial, -branchial, -bronchial, -capsular, -cellular, -cerebral, -cranial, -ligamentous, -molecular, -muscular, -nasal, -orbital, -osteal, -oval, -uterine, -venous etc. Non-medical are intra-canonical (included in the canon of Scripture), -ecclesiastical, -divisional, -imperial, -logical, metropolitan, -parochial, -mundane, -mural, -telluric a.o. An early ob is intrafoliaceous 1760.

Parallel to interstate relations is the type intrastate traffic. It seems to be quite recent. Examples are intracity buses (this and the type combination are often used in contrast to inter- phrases, with reference to segregational practices in the South), intraparty division (Senator Neuberger in the New York Times Magazine, July 7, 1957, p. 17). OED (s.v. intra- 2) has one instance (BE) from 1888 for intra-station traffic, but no other example.

3.29.1. mal- /mæl/

conveys the meaning ‘ill, evil, wrong, defective, improper’. It originated in loans from French where the prf had partly a negative (maladroit, malcontent, obs. malapert ‘unskilful’), partly a disqualifying character. The English prf has always had the latter shade: o. maltalent c 1320—1828 ‘ill-will’, o. maladventure c 1470 ‘lawless doings’, o. malapert c 1420 ‘unbecoming, insolent’ (as against the F meaning ‘unskilful’). Maladventure was followed by malversation ‘corrupt behavior (esp. as regards money) in an office of trust’ 1549. But it is only in the 17th c. that mal- becomes productive in English, along the line of the last mentioned words, with sbs belonging to the sphere of law and administration. They all denote an improper, irregular behavior, as maladminis-
tration 1644, malgovernment 1653, malpractice 1671, malexecution 1689, malfeasance (law French) 1696, malconduct 1741. Obsolete are mal-institution (of the law) 1714, and mal-publication 1715.

3. 29. 2. From the 18th c. on (OED: 16th c., but no examples are quoted) we have medical and physiological terms with mal- meaning ‘defective, faulty’, as malconformation 1776, malformation 1800, malconstruction 1809, maladjustment 1833, malposition (obstetr. term) 1836, malnutrition 1862, maladaptation 1877, malobservation 1886, malpropriety 1888, malpresentation (obstetr. term) 1899. Malodor 1825 may have originated in medical use though this assumption is not necessary as a few others of the above words can also be used in a larger sense.

3. 29. 3. The prf has never formed adjs in English: maladroit 1685 is F maladroit, malodorous 1850 is derived from malodor 1825, malformed 1817 from malformation 1800, malorganized 1862 from malorganization 1841, malposed 1900 from malposition 1836 (rather than “after transposed” OED). Malconceited 1608 and mal-discontented 1692 are nonce-wds with intensifying character in mal-.

The personal sb malpractitioner 1800 ‘corrupt practitioner of law or medicine’ is likewise derived from malpractice 1671. The vb maladminister 1705 is derived from maladministration 1644, maltreat 1708 is F maltraiter, orig. also spelled -ait in English.

In EMoE the spelling was male-, perhaps under the influence of Latin loans like malefactor c 1440, malefaction 1602. From the 18th c. on, the spelling mal- has prevailed.

3. 30. meta- /ˈmeɪtə/

forms scientific words, partly on a NL, partly on a native basis of coining. It has the meaning ‘transcendental’ or the like in metapsychology, metaphysiology, metabiology, metachemistry, metalogic (all on the prototype metaphysics). This use is 19th c. The OED has the nonce-wd. meta-theology (Donne).

In terms of pathology it forms adjs applicable to diseases or symptoms with the meaning ‘arising subsequently to . . . , following on . . .’, as meta-arthritis, meta-pneumonic, meta-infective. Meta- is preserved before a vowel, i.e. derivation does not follow OGr rules.

In the nomenclature of anatomy and zoology, meta- forms sbs and adjs with the meaning ‘behind, hinder, hindermost, situated at the back’, as in meta-thorax, metanotum, met-acromion, metabranchial, metafacial, metaesthetic, etc.
The terms are often correlative with meso- or pro- words (cf. metanotum/mesonotum, metaphragm/mesophragm, metagnathous/meso-, pro-gnathous etc.

In geological terms, meta- is short for metamorphic, as in metachemic ‘applied to chemical metamorphism’. Such words are clipping composites (see 9. 5. 1).

With terms of chemistry, meta- is prefixed to names of substances and conveys the meaning ‘isomeric with, closely related to . . .’, as in metacresol, metagelatin, metalbumin, metaldehyde etc. It is also used as “denoting certain inorganic acids and hydroxides derived from the ortho, or ordinary, form by loss of water (usually of one molecule of water from each molecule of acid or
hydroxide), as in metaphosphoric acid, HPO$_3^{2-}$ (Webster's Collegiate Dictionary). It may also denote 'any of certain benzene derivatives or compounds analogous to them in structure' (Webster's Collegiate Dictionary).

With the basic idea of 'resemblance' it is also attached to terms of mineralogy: *metabrushite* 'a calcium phosphate allied to brushite'.

3. 31. micro- /ˈmaɪkro/ has been in use in scientific wf chiefly since the 19th c. It is correlative with *macro-* in terms of anatomy, botany, and zoology.

In terms of biology, botany and the like, sbs with micro- signify 'minute size of . . . ', as micro-bacillus, -blast, -coccus, -gamete, -organism etc. etc. In terms of physics the prf is attached to the names of metric units with the meaning 'a millionth part of . . . ', as in micro-ampere, -angstrom, -volt, -ohm, -curie, -coulomb, -erg, -farad, -henry etc., etc as the counterpart of mega-. In botany micro-millimeter means 'one thousandth of a millimeter'. *Micro-* is often short for *microscopy* and has the meaning 'connected with the microscope' in words denoting branches of research carried on by means of microscopic examination, as micro-chemistry, -biology, -geology, -mineralogy, -mechanics, -physics etc., in words denoting properties or the like revealed by the microscope only, as micro-crystalline, -granite, -foliation etc.

*Micro-* is attached to names of instruments in various shades of the sense 'minute': micro-phonograph, -seismograph, -photograph, -telephone etc. We find this meaning also in other scientific words, as microwave, microgroove.

3. 32. mid- /mɪd/ is today a prefix though the OED does not list it as such. It is originally an adj, inflected down to ME, but also found as the first-word of cpds as early as OE. OE midwinter is used both as a cpd and as a syntactic group. As an adj *mid* is now superseded by *middle*. *Mid-* is chiefly combined with sbs. The notion of time underlies such words as midsummer, midwinter, midday, midnight (OE), midmorn a 1225, obs. midfast(en) c 1122 = midlent c 1450, midlune 1571, midnoon 1580, midweek 1707, midyear 1897, mid-season 1882 H. Other examples are mid-morning, mid-afternoon, mid-December etc., and such expressions as in the *mid-sixties*.

Place-denoting sbs are all technical terms (medical, botanic, astronomic, nautical, sports); most of them date from the MoE period: mid-riff (OE), mid-brain, -breast, -chest, -finger, -kidney, -leg, -gut, -rib, -air, -heaven, -sky, -sea, -ship, -water, -land, -field, -stream. Scotch has preserved more words with *mid-*; see OED. Recent is mid-America.

Since the 19th c. *mid-* can be prefixed to adjs derived from sbs denoting place or time: mid-facial / mid-monthly, mid-Victorian. There are also such cpds as mid-early (potatoes).

3. 33. 1. mis- /mɪs/ is used with vbs and deverbal nouns (but it is rare with deverbal adjs such as misrepresentative). The prf formed the categories as early as OE. During the ME period, many French words with *mes-* were adopted and F *mes-* had
about the same senses mis- had. The two prfs naturally fused into one, and mis- today stands for both. It is therefore prefixed to native as well as foreign stems. Used primarily and exceedingly frequently with vbs, it conveys the meaning ‘badly, wrongly, improperly, amiss’, in the 15—16th c. also ‘unfavorably’. Examples are misdo, mislead, mislike, misteach, misurite, o. mislive (OE), and later miscall, misname, misknow, misdeem, misunderstand, mistrust, mishear, misdeal, misrun, mislay, mishandle, misshape / missspend, misapply, miscarry, miscreate, misseem, misconceive, miseducate, miscalculate, miscopy, misdeliver, misgovern, mismanage, misrepresent, misrule.

3.33.2. Among the nominal forms of vbs, ptc's occupy a special position insofar as they have a semi-independent kind of existence. Misshapen, misbegotten are the only common forms of the vbs misshape, misbeget, and no infinitives are in use either with misgrafted, misborn, misgotten, mis-sworn ‘forsworn’, misgrounded, misproportioned. We observe a similar tendency with neg. un-, under-, and over-. It is this independence which temporarily caused mis- to become a quasi-adverb which could follow the ptc (between 1225 and 1450, see OED).

3.33.3. Deverbal sbs are esp. frequent. As with the preceding group, the corresponding vb is often not in existence. Such sbs are coined in their own right; they have the meaning ‘wrong, improper, incorrect, bad, lacking (formerly also ‘evil’) . . . ’. The type is likewise OE, (but only misdeed has survived into MoE). Examples are misadvice, misalliance, misapprehension, misarrangement, misbehavior, misbelief, miscarriage, mischoice, miscalculation, misconception, misconduct, miscounsel, misdeed, misdirection, miseducation, misseem, mis-exposition, misfit, misgovernment, misgrowth, misjudgment, mismanagement, misprint, misrule, mispronunciation, misworship.

3.33.4. Cbs with non-deverbal sbs are uncommon. Examples are misword ME, misfortune 1502, misventure 1563, misdevotion 1612, misreligion 1623, misintelligence 1639, misconjecture 1646, miscreed 1821, misfeature 1821, mis-proportion 1825, miscue 1873 (a billiard term). Orig. loans from French are misadventure, mischance, misuse.

3.33.5. English has very few adjs with mis-. Prefixed adjs are misproud ME, miszealous 1617, perh. obs. misruly ‘unruly’ (ME-1598). Misfortunate 1530 is backderived from misfortune, miscontent. There are a few possessive adjs, prob. influenced by pret. ptc's, as mismated, misminded, misnatured, misprincipled. The normal type for them is, however, ill-minded.

The prf has been productive in all periods of the language. A good proportion of the preceding examples date from the ME period, a good deal were coined between about 1550 and 1650, which was the most fertile age for the coining of words, anyhow. Mis- was a vogue-prefix with Bacon, Donne, and Jos. Hall.

3.33.6. The stress problem seems to offer difficulties. According to OED and Webster, the prf never bears the main stress. In recent usage, however, disyllabic sbs may have forestress (Kenyon-Knott give only misshap and misprint as a second pronunciation), so one also hears misdeed, mischoice,
misrule, misgrowth, mishap; it also occurs in short converted vbs, as a misfit, a misprint. In all these cases, the radical has a middle stress. With vbs and deverbal derivatives the stress pattern is as indicated in misprint, mismánagement, i.e. the main stress is on the radical while the prf has a middle stress.

3.34. mono- /'mənə/

forms scientific words only. The cbs are chiefly extended bahuvrihi adjs (type monodactylous ‘having one finger’), but there are also unextended bahuvrihi cpds which may be both adjs and sbs (type monocotyledon ‘plant having one cotyledon’, monophasic ‘exhibiting one phase’).

New formations have been made since the 18th c., chiefly with the establishment of the Linnaean system. Examples are monocarpellary, monocarpic, monostylous, monopetalous, monophyllous, monocardian, monolobular, monoganglionic, monozoic etc. The 19th c. has added many terms belonging to chemistry, as monobasic, monoacid (or monacid), monochloride, monoxide, monocarbon etc. all meaning ‘having one...’. In most cases the radical is Greek, but there are also cbs with a Latin radical: monocarbon, -cellular, -tint, -valent.

The words are coined on a Neo-Latin basis, with the final vowel usually elided before the vowel of a radical (but also mono-acid besides monacid).

3.35.1. multi- /'mʌltə/

is used in scientific or technical terminology and with a few learned words of a more general character. The original types are the Latin parasynthetic adj types multiformis and multidentatus meaning ‘many -ed’. We find Ec chiefly from the 19th c. on. Examples are multi-angular, -cellular, -cuspid, -dentate, -florous, -ganglionic, -jugate, -lateral, -laminar, -lobar, -nuclear, -ovular / -fluvian, -personal, -sensual, -titular.

3.35.2. After the preceding group there were coined possessive adjs of the corresponding native type multibladed: multibranched, -faced, -hued, -pointed, -rooted, -toed, -voiced, -motored. The type is uncommon, however.

Multi- is also prefixed to preadjunctal sbs of the type multispeed (motor): multi-charge, -coil, -cylinder, -motor, -phase. The rise of the type was perhaps favored by multiform 1603 and multivalve 1753 which look like our type, but in reality represent the Latin parasynthetic adjs multiformis and multivalvis.

3.35.3. As bahuvrihi sbs were coined multicycle and multifoil. Multimillionaire and multispecialist are perh. ultimately to be analysed as ‘having many millions resp. specialties’. Multifold and multigraph are variants of the regular words manifold and polygraph.

The words coined on a NL basis change multi- to mult- before a vowel: multangular, multanimous, multarticulate acc. to Latin rules, but multi- is also prefixed in its full form (multangular, multiovular etc.).

3.36. neo- /'niə/

has been a prf with English words since about 1850 and is now in frequent use with learned and scientific words. It is a revival of OGr neo- ‘new’, occurring in cbs such as neógamos ‘newly married’, neoglyphés ‘newly carved’ etc.
In English it forms learned words of the type Neo-platonism 'new platonism', the radical denoting a system or its follower, also a language or the like. Such cbs are possible ad libitum, exs are neo-Anglican, -Pythagorean, -materialist, -protectionist, -Catholic, -Calvinist, and their corresponding -isms etc. etc.

In geological terms neo- implies opposition to palæo- and suggests a recent or more recent period, as in neolithic, neo-cambrian, neo-volcanic, neo-silurian etc.

Neo- is also used with names of various things with the general meaning 'recent', as neocyanite 'a recently discovered mineral', neonatal 'relating to a new-born child' etc. (see OED for more instances).

The prf has a middle stress while the main stress is on the radical. In tri-syllabics the stress is, as usual, on the prf (neotype, neodox). There is no elision, except before o (neontologist, neontological).

3.37.1. non- /nɔn/  
The ultimate origin of this prf is to be sought in Law Latin. Roman Law knows the following types of negated words: 1) the personal noun type non-creditor, occurring in words such as non-debitor, -dominus, -filius, -procurator, -meretrix a.o., 2) the weak abstract noun type non-issue (occurring only in the ablative), found in words such as non-mandatu, -vi, -voluntate, 3) adjectival type non-alienus, as found in non-aequus, -alius, -bonus, -ambiguus, -capitalis, -necessarius a.o., 4) the verbal type non-dubitare, occurring chiefly in the nominal forms, i.e. the present ptc and the gerund: non-cernendo, -contradicendo, -dubitans (see Vocabularium Jurisprudentiae Romanae, ed. Felix Lesser, Berlin 1914, tom. 4, fasc. 1, s.v. non-).

3.37.2. We find the same types in Old French. But type 1) which is the strongest in Latin, appears very weak whilst type 2), in combination with the deverbal sbs of type 4) has grown very strong. We find such words as non-foi, -purté, -créance, -obstance, -puissance, -sachance a.o. Of type 3) we find non-droituirier, -juste, -pareil, and ptc of type 4) such as non-divis, -poant, -puissant a.o. As the language of jurisprudence in England was Law French, non-words were used in England as well as in France. The first words occurring in English are, indeed, Law terms, orig. only sbs. From the 14th c. are recorded non-age, non-power, non-payment, non-residence, non-suit, from the 15th c. non-ability, non-appearance, non-claim, from the 16th c. non-feasance, non-performance, non-resident, non-user, non-tenure. In the 17th c., the range of non-words became larger. Non- was extended to adjs and ptc, chiefly prt ptc. Present ptc, except latinizing ones, have always been rare. The new types are non-harmonious, non-graduated, non-preaching, non-communicant. The close of the 16th c. is a turning-point from another point of view also. New coining are no longer Law terms, but words belonging to philosophy, religion and political history. Words which have gained a wider currency are non-obedience, non-communicant, non-necessity, non-proficiency, non-subscriber (end of the 16th c.), non-member, non-natural, non-resistance, non-existence, non-existent, non-entity, non-elect, non-juror, non-juring, non-jurant, non-collegiate, non-compounder, non-conformist, non-conformity, non-descript (17th c.), non-resistant, non-importation, non-commissioned, non-content, non-effective,
non-essential (18th c.), non-moral, non-substantial, non-committal, non-intercourse, non-rejoinder, non-regulation, non-contradiction, non-interference, non-intervention, non-intrusion, non-combatant, non-Euclidian (19th c.), non-belligerence, non-belligerent (World War II).

3. 37. 3. With the development of science, non- has formed words such as non-conductor (1759), non-condensing, non-metallic, non-metal, noncontagion (19th c.).

Non- may be attached to preadjunctal sbs, as in non-Gospel phrases 1654, non-Papist Merchant Strangers 1687, non-jury case, non-society workman, non-church people, non-party character, non-tax revenue (19th c.).

Since the 19th c. non- words have become very frequent. Non- can today be prefixed to almost any adj. The majority are parasythetic or participial adjs. Examples are non-active, non-breakable, non-competent, non-defensive, non-efficient, non-fiscal, non-gaseous, non-heathen / non-analysed, non-interrupted, non-irritating etc. etc. Less frequent are impersonal deverbal sbs, as non-adherence, non-admission, non-combustion, non-conviction, non-demand, non-exercise, and personal sbs, as non-abstainer, non-believer, non-parishioner, non-sympathizer, non-dealer, non-producer, non-householder, non-creditor, non-depositor, non-heritor.

3. 37. 4. Non- is not used with vbs. The OED has the unusual cbs to non-act and to non-licentiate as nonce-words from the 17th c. Ptc's, chiefly second ptc's, have been in use since the 17th c. Among the earliest examples are non-preaching 1622, non-interrupted 1661, non-incarnated 1671, non-graduated 1693. At one time (15th to 17th c.) non- was frequently prefixed to the vs. This use is extinct today.

From this century have arisen coinages like non-stop flight, non-stop train, non-skid tire, non-slip soles, non-cush fabrics, non-drip pouring lip, all commercial jargon.

3. 38. pan- /pæn/

conveys the meaning ‘all, comprising or affecting all’. It is ultimately the OGr prf pan-, chiefly used with adjs of the type panarmónios ‘allfitting, panharmonic’ or panagathós ‘entirely good’. It was less in use with deverbal and deadjectival sbs, but it is these that Neo-Latin coined freely, and from about 1600 on we find English scholarly cbs such as pansophy, panorganon, panopticon, pangrammatist, panorama, pantechnicon, pandemonium (Milton), panclastite (an explosive) / pandemic (ext. fr. OGr pandemos, -ios), panchromatic, panerotic, panneurotic.

In many terms of philosophy pan- implies the idea ‘universe’, as in pantheism, pantheist, panlogism, pansophism, panentheism, panpsychism etc. The prf is in general use with national names. In Classical Greek there was only the word panathēnaia ‘the panathenaean festival’, later Greek formed paniónios, panellenios, panatolikós which passed into Latin. We find panaetolicus in Livy and panionius in Pliny. Neo-Latin coined pan-anglicus (q. OED s.v. pan-Anglican) and probably others. The earliest English words appear to be panionian 1830 and panhellenic 1847 (prob. consequent on the Greek war
of independence 1821/29). The next political term, an outspoken slogan, is panslavism 1850 (originating, as it seems, in Germany; the English word is first quoted as panslavismus in 1846), panslavist 1850 and panslavonian 1854 followed. Other terms have been coined subsequently, all with the meaning 'comprising all . . .', as pan-American, pan-African, pan-Anglican, pan-British, pan-German, pan-European, pan-Islamic with the corresponding words in -ism, -ist. This group is coined on a native basis of coining, whereas the preceding one is formed on a NL basis, the prf being attached to Greek stems only.

3.39. para- /'pɛra/

is the OGr prf para- as found in numerous OGr words (sbs, vbs, adjs). English has only nominal derivatives. With a few exceptions they date from the 19th and are chiefly terms of biology and natural history, all coined on a NL basis.

On the OGr type parathyros 'situated beside the door' are formed parabasal, paracentral, parachordal, paragastric, paramastoid, parasternal, parathyroid, paravesical, paraxial, parumbilical.

OGr para- in obs with sbs had the meaning 'by-, not main' (the exact parallel of L by-), as in parathlon 'secondary combat'. On this basis we have paraplasma, parablast, paracyst, paramaster, paramorph and derivative adjs like paraphysical, parasyphilitic, parabrail, paranucleus etc.

In chemical terms para- has the sense 'occurring with, produced along with', prefixed to names of substances as parabenene, parachloralide, paracyanogen, paraldehyde.

3.40. per- /pɛ(r)/

is only used in chemical phraseology. With the beginning of the 19th c. words are coined on the following types: perchloride 'chloride containing a relatively high proportion of chlorine', perchlorate 'salt of perchloric acid', perchloric 'pertaining to or designating the highest oxygen acid of chlorine'. Examples are periodide, peroxyde, percarbide, peracid / perborate, periodate, permanganate / perbox, periodic, permanganic.

This use goes back to L per- used as an intensifying prf with adjs such as permagnus, perlautus, perimbecillus etc. 'very, exceedingly . . .'.

3.41. peri- /'perɪ/

is a prf with terms of anatomy, medicine, and natural history, formed on a NL basis. We have parasynthetic adjs, ultimately formed on the OGr type perigeios 'surrounding . . .', as peribrachial, peribronchial, pericellular, perchordal, periotic, peristomatic etc. The group goes back to the 16th c.

There are many parasynthetic sbs in -itis of the type pericarditis 'inflammation of the part surrounding . . .', as perichondritis, perinephritis, perineuritis, peristitis / periarthritis, periarthritis etc.

There is no elision of the vowel in OGr, so the prf always has its full form in NL and English. The main stress is on the radical.
3.42. **poly-** /ˈpɒli/  

is the counterpart of *multi-* (which is prefixed to Latin stems) in scientific words with a Greek root. The ultimate OGr types are polýpous 'many-footed' resp., as a bahuvrihi sb, 'one who has many feet' and polypódía 'state of having many feet'. AL borrowed many words from Greek (many in Pliny). NL has made use of the prf, esp. in the phraseology of natural history, and English follows this line. Many of the English words have an actual OGr pattern, which need not, however, have been the pattern for the English coinage.

Examples of adjs are *polyandrous, polyatomic, polychromatic*. The prf has various uses in chemistry for which I refer the reader to the OED.

There are words with *poly-* from a Latin stem such as *polyvalent, poly-angular, polynucleate, polydigital*, even a few with *poly-* prefixed to a native root, such as *polysoil farm* (1778), *polypage plate* (printing term), *polygrooved rifle*. In chemistry, the prf is used with words of Greek and Latin origin alike.

3.43. 1. **post-** /ˈpɒst/  

with the basic meaning ‘after’, ultimately represents AL *post-*, a verbal and nominal prf. The AL types were *postponere* ‘put after, put off’, *post-meridianus* ‘taking place after mid-day’; the type *postcommunio* ‘the part after communion (in mass)’ is ML only.

The type *postponere* has been imitated in a few words such as *post-date* (the only common word), *-exist, -fix / -determined, -prophesied / -jacent, -communicant / -position, -existence, -fruition.*

A few technical terms have been coined in which the relation is that of adjunct/primary, as *post-entry* ‘subsequent entry’, *post-warrant*. But *post-* has not acquired the independent adjunctal character of *ante-* (nor has *pre-*), as the stress pattern \( \sim - \) shows. The OED (s.v. *post-* A. 1. b.) has a good number of sbs formed as adjunct/primary groups with the meaning ‘subsequent . . .’, all having the main stress on the radical. The stress pattern regularly to be expected is found in *post-date* and the before-mentioned *post-entry* and *postwarrant*.

An adjunct/primary relation also underlies terms belonging to anatomy, of the type *post-abdomen* ‘posterior part of the abdomen’, as *post-cava, -clavicle, -furca, -nares a.o.*, likewise stressed on the radical.

3.43. 2. The only type that has really become productive in English sf is type *postmeridianus* (which in CL is still weak, but grows in subsequent periods). Though we have coinages from the 17th c. on, as *postmeridian* 1626, *post-diluvian* (after *antediluvian* 1646) 1680, *post-connuibial* 1780, the vast majority date from the 19th c., as *post-biblical, -pagan, -baptismal, -resurrectional, -classical, -Roman, -natal, -nuptial, -graduate, -prandial / -cretaceous, -diluvian, -glacial, -tertiary / -Adamic, -Cartesian, -Darwinian, -Homerian, -Kantian, -Elizabethan* and other derivatives from proper names.

3.43. 3. Developing at about the same time as the corresponding types *pre-* and *ante-war years* (second half of the 19th c.), formed after the prototype *anti-court party*, we have the type *post-war years* with cbs such as *post-Pliocene period* (1847), *post-election period, post-Easter time, post-Reformation, post-Restoration etc. period*. The idea is always that of ‘time following . . .’.
3. 43. 4. In medical terms of the 19th c. and later, post- indicates conditions or symptoms following an attack of . . . , as in post-diphtheritic, -epileptic, -influenzal, -paralytic, -paroxismal, -scarlatinal etc. The same meaning is conveyed by meta- (see there).

3. 43. 5. In the nomenclature of anatomy and zoology are used adjs of the type post-abdominal ‘situated behind, at the back of . . . ’, as post-frontal, -oral, -ocular, -temporal, -anal, -cerebral, -orbital, -tympanic, -scapular etc. There is again a parallel meta- type.

3. 44. 1. pre- /pri/

is a nominal and verbal prf conveying the idea ‘before’ in various locative and temporal shades. It is ultimately L praef- which was spelled pre- in ML and OF.

In Ancient Latin, the verbal type praedicens ‘tell beforehand’ was very strong, and its productivity increased even more in later periods. French early imitated the pattern, and under the combined influence of Latin and French, pre- verbs originated and grew in English. Among the earliest words found are predestine 1380, prefigure 1450, both ecclesiastical terms, and presuppose 1426, all loans from French. From the 16th c. on, English derivatives are formed freely, but I shall give only a few of the more common verbs. The following are first recorded in the 16th c.: preconceive, precontract, predefine, preelect, preexist, prejudge, premeditate. Among the numerous coinages of the 17th c. we find such verbs as preadmit, premeditate, prearrange, predigest, predispose, preengage, preestablish, prepone. From the 18th c. are recorded preassure, preconcert, precontrive, from the 19th c. preannounce, prearrange, precalculate, predesignate, prepay.

The prefix is chiefly attached to verbs of Latin origin. Cbs with native words are less frequent, except for recent technical coinages such as prebake, preboil, precook, precook, preheat, preshrink.

3. 44. 2. Latin action sbs of the type praedictio were adopted alongside of their respective verbs, other deverbal sbs were formed from the English verb, either on a native (pre-engagement) or on a Latin morphologic basis (preconception). A sb like preconception is basically a derivative from preconceive with the sense ‘act of preconceiving’. However, as conception is an independent word, preconception can be analysed as an adjunct/primary group, ‘previous, anticipatory conception’. We accordingly have coinages of either semantic pattern, often with one and the same word. Analysis on an adjunct/primary basis may even lead to an occasional combination with a sb that is not a deverbal derivative, as precondition 1825 (prehistory 1871 is a derivative from the adj prehistoric 1851). In principle, however, the group has preserved its deverbal character. An early derivative is pre-contract 1483; a few others are recorded from the second half of the 16th century, as preequipment, preapprehension, preconsideration, and the now rare word preordination. The 17th century is represented by such words as preamonition, preapprehension, preeupassurance, preconception, prediscion, predesignation, predisposition, preelection, preengagement, preexistence, preoption. From the 18th century date
prearrangement, preattachment, pretextation. More recent are preperception 1871 and preadmission 1887.

Derivation from native roots is uncommon. Combinations such as preboding, preknowledge, prename, preshadow, preshow, pretoken, recorded in OED, are not characteristic of general usage.

With the exception of disyllabic words like preprint 1889 and preview 1882 which are forestressed, deverbal sb's have the main stress on the nominal basis.

3.44.3. Neo-Latin has the type pre-abdomen 'anterior part of the abdomen' which is parallel to the type post-abdomen (discussed 3.43.1.). English combinations are chiefly used in their Latin form. They are terms of anatomy and zoology, as pregenicular, preomosternum, prerima, prescutum / prepeduncle. The pattern dates from the 19th century.

3.44.4. The parasythetic adj type pre-natal dates from the 19th c. There is no pattern for it either in Ancient or Medieval Latin. Neo-Latin coined the sb prae-Adamita which passed into English and gave rise to pre-Adamitical 1716. The rise of the 19th c. type was not, however, occasioned by this isolated coining, but probably came existence as parallel to type ante-diluvian which is much older. The earliest recorded word is pre-diluvian 1804. Later are pre-prandial, pre-natal, pre-Christian, pre-millennial, -human, -historic, -glacial, -Roman / -Alfredian, -Baconian, -Chaucerian, -Darwinian, -Messianic, Raphaelite / -Cambrian, -Laurentian, -Silurian.

The implication is sometimes 'previous (prior) to the fact, knowledge, use, existence or the like of . . .', as in pre-bacillary, -bromidic, -anaesthetic, -conubial, -dynastic etc., or 'preparatory or prerequisite to . . .' as in the educational terms pre-medical, -professional, -vocational (-college, -school).

With native adjs the type is not in use. A word like preearthly 1848 is exceptional.

In medical terms (correlative with post-), pre- conveys the meaning 'previous to the stage of the disease of . . .', as in pre-albuminuric, -ascitic, -cancerous, -diastolic, -phthisical, -paroxysmal etc.

3.44.5. The type pre-war years (parallel to ante-, post- and inter- sb's) develops in the second half of the 19th c. Examples are pre-railroad world, pre-advertisement era, pre-Easter season, pre-election pledges, pre-development stage, pre-disease warning, pre-school benefits.

3.44.6. The type pre-natal has its locative counterpart in the type pre-bronchial 'situated before or in front of . . .'. Coinages of this type belong to the phraseology of anatomy and zoology and are 19th c. or later. Examples are pre-axial, -coracoid, -dorsal, -frontal, -maxillary, -molar, -ocular, -orbital, -temporal, -vertebral.

3.44.7. AL had a strong adjectival type praelurus 'exceedingly . . .'. Scholarly writers have tried to introduce the type into English with words such as pre-pleasing 1530, pre-Luciferian 1630, pre-regular 1647, pre-pious 1657. But this is as far as the type goes.
3. 45. preter- /’pritə/ 

is ultimately L praeter, in ML spelled preter ‘past, beyond’. In AL praeter- was a verbal prf only (praeter-ago, -curro, -duco etc.). After the pattern of other parasynthetic adjs (ultramundanus, extranaturalis etc.) ML formed the type preternaturalis. From the 17th c. on we have Ec, beginning with adapted preter-natural 1600. The meaning of these adjs is ‘beyond, outside, more than (the range, compass) of . . .’. Most of the existing sbs were coined in the 17th c., as preter-essential, -intentional, -native, -political, -scriptural, -regular, -notorious, -seasonable. A few words were added in the 19th c., as preter-human, -sensual, -nuptial ‘extra-marital’.

The type has proved weak against the types with extra-, ultra-, trans-. It has not been used in scientific nomenclature.

3. 46. pro- /pro/ (type proconsul)

was used in Latin with designations of office-holders, as proconsul, pro-praetor, proflamen, progubernator, also with a few other words like pronym and protutela. The meaning is ‘substitute of . . .’. In Modern Latin, words such as prorector, proproctor are terms used in universities and similar institutions. In English we have adaptation and imitation of Latin usage in words such as obs. prorex 1586, prorector, -proctor, -legate, -tetrarch, -vice-chancellor (17th c.), pro-regent 1798, pro-guardian, -Provost, -Grand Master (19th c.), a few rare impersonal sbs as pro-tribune 1645, pro-cathedral 1668, pro-reality (19th c.), and adjs such as pro-substantival 1794, pro-ethical (19th c.).

3. 47. pro- / pro / (type pro-amnion)

This is a 19th c. scientific prf equivalent to fore-, pre-, ante-, sometimes proto-. Its use is almost restricted to sbs and adjs of natural history. It is ultimately OGr pro-. Already in LL we find many words such as proboscis, proplasma, propigneon ‘praefurnium’, proastium, procaenium, procomion which were analysable as prf-formations. But PE usage is not a continuation of these, but a NL revival of the various types in the service of scientific nomenclature. The types are pro-ethnic ‘previous to, preceding . . .’, as in procosmial, -baptismal. The type is weak. Its counterpart is the type pro-otic ‘situated in front of the ear’ which forms anatomical and zoological adjs: proscephalic, -chordal, -cennial.

The type pro-amnion with the implication ‘primitive amnion in the embryonic stage of some animals’, based on OGr words such as proarché ‘original beginning’, prodoméus ‘first builder’, we have in words like pro-meristem, -peristome, -angiosperm, -cambium, -thallium.

The type pro-glottis ‘front part of . . .’ (the type word is OGr) has formed sbs belonging to anatomy and zoology, as pro-osteum, -nephron, -notum, -scutum, -stomium, -thorax.

These combinations date from the 19th c. The basis of coining is Neo-Latin, and sbs are stressed accordingly, i.e. on the radical. The pronunciation also is NL, the OGr o was a short o.
3.48. **pro-** /[pro/ (type pro-British)

as in pro-British ‘in favor of...’ is the opposite of anti- and has probably arisen as such. The OED supposes that it originated in sb pro ‘one who votes in favor of a proposal’. This origin is impossible as the word-order type pro-British = friend-Briton is contrary to the principles of E w. The first instances occur shortly before 1830: pro-popyry Ministry 1820, pro-Catholics 1831, pro-transubstantiation passage 1839, pro-educational and anti-slavery parties 1839. There are many cbs in connection with the problem of slavery: pro- Slavery action 1843, pro Slavery-ism 1843, pro-Slavers 1858, pro Slave 1856, pro negro party 1892. In the last years of the 19th c. pro- begins to attain the range of frequency with which it is today used in political jargon. Examples are pro-American, -English, -German, -Russian where pro- is prefixed to national names.

Pro- was originally and has always chiefly been prefixed to attributive adjs and preadjunctal sbs (as in pro-British policy, pro-Boer movement). These cbs can also be used predicatively. A few are used as sbs, as a pro-Boer. From cbs such as pro-Slave policy developed others in which the last member is a sf, so we get parasynthetic sbs like pro-slaver, pro-Boader, pro-liquorite, proflagger (with a verbal stem) / pro-clericalism, pro-Boerism.

The use of the prf in other European languages (French, German) is probably influenced by English usage.

3.49. 1. **proto-** /'prote/

is a prf with learned and scientific words. It is ultimately OGr próto-, a chiefly nominal prf with the meaning ‘first, chief’. OGr words with a religious tinge passed into Late Latin, as protomystia ‘high priest of ancient religious mysteries’, prototypos, protoplastus (= ‘Adam’). Ecclesiastical Latin formed words also from Latin stems as proto-lapsus ‘first-fallen’ (= Adam), protosedee ‘sit at the top’ (Tertull.). Non-ecclesiastical words are protonotarius ‘principal notary in the Byzantine court’ LL, protoforestarius ‘chief forester’ ML, protophylarchus ‘head of a tribe in Utopia’ MoL. It is chiefly this substantival type which gives rise to English formations.

3.49. 2. From the close of the 16th c. on, the prf is productive in English. The types are proto-type ‘first, primary, original type’ and proto-traitor ‘chief, principal traitor’. Examples are protomartyr LME (= OF = ML = OGr), proto-apostate, -bishop, -chronicler, -god, -heresiarch, -historian, -parent, -protestant / proto-ideal, -plot, -pattern and a few others, all of the type proto-type. The words are no longer in use. On the type proto-traitor are formed protonotary 1447 (LL), proto-architect, -chemist, -devil, -groom, -magnate, -rebel, -abbacy, -justiciaryship, all uncommon today (cf. arch-).

3.49. 3. In the second half of the 19th c. proto- came to be used with adjs denoting languages, races, tribes, styles of architecture etc. of the type proto-Arabic ‘primitive Arabic’, as proto-Babylonian, -Caucasian, -Celtic, -Doric, -Egyptian, -Greek, -Ionic, -Phoenician / proto-lithic etc. These words are not much used, cbs with primitives for the first-word being usually preferred.
3.49. 4. In 19th c. terms of biology and zoology (many of them appear in NL form) designate an (actual or hypothetical) primitive type, organism or the like, as protamnion, protoconch, proto-organism, protonema (nema 'thread'), protodome, protoplasm, protoprism, protospore, protosomite, protohippus, protococcus.

3.49. 5. In chemistry proto- denotes "the first or lowest of a series, or one having (or supposed to have) the smallest relative amount of the element or radical indicated in the name to which it is prefixed, as in protoxide", also "a substance that is held to be the parent of the substance to the name of which it is prefixed" (Webster's Collegiate Dictionary).

3.49. 6. The scholarly words following the types prototype, prototraitor, and proto-Arabic are coined on a native basis, i.e. proto- is invariably prefixed to an English scholarly word. The words belonging to zoology, biology and chemistry are usually coined on a NL basis, i.e. they follow the linguistic laws of OGr according to which they were also formed in NL. We therefore have prot- before a vowel: protamnion, protastacus, protamoeba / protoxide. Exceptions are proto-organism, proto-actinium.

3.50. 1. pseudo- /'sdjuːdəʊ/

ultimately represents OGr pseu đó-, a combining form from stem pseud- (as in pseudos 'falsehood, lie'). Pseudo- (before vowels pseud-) was exceedingly frequent in Late Greek wf. Several words passed into Late Latin, esp. terms of natural history (pseudo-sphēx 'false wasp', pseudosmaragdos 'false emerald') and words from the vocabulary of the Church, as pseudochristus (Itala), pseudoprophetos (Itala), pseudapostolus, pseudochristianus, and pseudo- became very productive in Latin (hence in French, German and other languages). Beginning with Wycliff we find pseudo in English, and it is proof of the frequency with which pseudo- was used in Latin and French at that time that it was apprehended as a full word in English and so used for a long time, chiefly as an adj, but also as sb and adv. In Wycliff we find pseudo-christ, pseudoprophet, pseudo-frere (= friar), pseudo-clerk, pseudo-priest. These words remain within the sphere of religion, and for about two centuries no other coinages are recorded. After 1600 pseudo- cbs grow common. "At least 20 examples appear before 1700, and 20 more before 1800. By 1800 pseudo- had become a living element prefixable at will" (OED s. v. pseudo-).

3.50. 2. Type pseudo-Christ. With sbs, pseudo- conveys the meaning 'spurious, false'. Up to 1800 this was the prevalent type. Exs are practically ad libitum, such as pseudo-catholic 1605, pseudo-Moses 1613, pseudo-politician 1628 (the earliest quotations in the OED), pseudo-prophetess, zealot, ascetic, chronologist, enthusiast, patriot, patron, evangelist (all before 1800), bard, legislator, gentleman, philanthropist, education, philosophy, bible etc. etc.

3.50. 3. The type pseudo-archaic has chiefly developed since 1800. Examples are pseudo-catholic, christian, classic, Gothic, religious, romantic, dramatic etc. etc. The implication is 'falsely...'. 
3.50. 4. The cbs of the preceding types are coined on a native basis, i.e. there is no elision before a vowel. Things are different with terms of scientific nomenclature which follow the rules of OGr and NL, though here also we observe a tendency to prefix pseudo- unchanged. Cbs of this group have been coined since the 19th c. The types are the same as those treated above. A few exs are pseudoaesthesia, pseudambulacrum, pseudarthrosis, pseudaxis, pseudo-branch, pseudocyst, pseudoclerosis etc. etc. / pseudo-bulbous, pseudo-ceratophorus, pseudocorneous, pseudo-parasitic etc. etc. With these words pseudo- denotes (deceptive) resemblance.

The full form of the prf (i.e. we have word-coining on a native basis) appears in pseudo-acacia, -alcaloid, -angle (Geom.), -articulation (Zool.), -urate, -uric, -erysipelas and others.

3.51. 1. re- /ri/

is a prf chiefly tacked on to transitive vbs, it conveys the meaning ... anew, again’, occasionally ‘... back’. Its use as a prf is probably due more to French than to Latin though the OED has it rather the other way round.

In AL we find re- with various meanings of ‘back, again’, but the prevalent sense it acquired in LL is ‘a second time, again’, as in refigurare, reformare, regenerare, recoquere, rebaptizare, reediificare a.o. The sense of repetition is the strongest one in OF also and the only one the French prf has today. From about 1200 on we find re- words in English, up to 1500 chiefly loans from French. We have almost no Latin loans at all before the middle of the 16th c. whereas English new formations occur from the 15th c. on. This is not in favor of the theory of the OED according to which the prf is due to loans from Latin. Examples of words English borrowed from French are recoil, rebel, receit, release, remue, restore, record, relieve, repent, reward, restitue, rehearse from which, however, no prf could spring as the vbs had no unprefixd counterparts to go with. But there were others, as revest, redress, recomfort, reform, reseize, refigure, reeditify, recover, recharge, repass which all admitted of the analysis ‘... again’.

3.51. 2. By 1450 re- had come to be felt as a prf, as we have re-enter 1442, re-establish 1483, re-assemble 1494 from F rentrer, restablir, rassembler. Re-establish was coined alongside of older reestablish 1413, a fact that is significant as to the prefixal character of re-. And we have reascend 1450, re baptize 1460, reassume 1494 for which no French pattern appears to be recorded, with the meaning required here, at least. Rebaptize may, however, be due to rebaptizare LL, rebuild 1590 was probably formed after reeditify, reflow after refiuerre L. Other Ecs follow, derived from French, Latin and native bases. 16th c. are re-secure, re-bellow (= L reboare ‘bellow back’), re-born, re-consider, re-convoy, re-echo, re-enforce, re-examine, re-found, re-gain, re-greet, re-instate, re-kindle, re-live, re-plant, re-print, re-tread. From the 17th c. are recorded re-inforce, re-act, re-admit, re-adjust, re-appear, re-assert, re-attach (Law term), re-boil, re-cast, re-compose, re-convert, re-distribute, re-draw, re-export, re-fill, re-fit, re-invest, re-ordain, re-organize, re-produce, re-publish, re-set, re-touch. The 18th
c. has considerably fewer coinages: re-absorb, re-capture, re-cede, re-construct, re-count, re-dress, re-load, re-open.

The 19th c. coined re-arm, re-attach, re-birth, re-bite, re-book, re-district U.S., re-hash, re-line, re-play, re-awake(n).

3.51.3. The prf is only used with transitive vbs, i.e. re- does not express mere repetition of an action, it connotes the idea of repetition only with actions connected with an object. And it is with a view to the result of the action performed on an object that re- is used. The result of the action is 1) either understood to be imperfect or unattained, and re- then denotes repetition with a view to changing or improving the previous inadequate result (as in redirect (a letter), rearrange, respell, rewrite). Cp. also rewrite as an American term of journalism with the meaning 'put (the reporter's material) into form for publication'. Change, though not improvement, is also implied in the word resettle for G umsiedeln (I first came across this shade of meaning in 1947), whereas the likewise recent politically tinged word re-education does imply change for the better. 2) The result of the action resp. the former state has come undone, and then re- reverses the reversal, restores the previous result or state. Examples for this meaning are repossess, reimburse, recapture, reinstate, reinvest, reconvert, resole.

The agent of the re- action may or may not be the same as that of the original action. In the latter case, the meaning is sometimes '... back', as in reconvey, re-export, repurchase a.o.

3.51.4. From the 19th c. and esp. in recent technical usage we have re- prefixed to desubstantival verbs with the meaning 'furnish with new ...'. Among the earliest words are refuel 1811, rehouse 1820, from this century are re-wire 1903, re-tread 1908 'furnish (a tire) with a new tread'. Other vbs are re-arm, re-coat, re-coal, re-color, re-engine, re-face, re-ink, re-label, re-mast, resurface, re-paper, re-stock, re-type.

3.51.5. 19th c. are also deadjectival vbs of the type re-English 'turn into English again'. Most vbs are, however, coined on the type re-Ameriklisize 'turn into ... again', as re-brualize, re-conventionalize, re-fertilize, re-latinize, re-hellenize.

Almost any transitive vb can today be prefixed by re- (see list in OED s.v. re-), but the prf is rare with intransitive or intransitive'y used vbs. Most of the vbs that occur are of Romance origin (in French re-, ré- is prefixed to intransitive as well as transitive vbs), as re-enter, re-ascend, re-descend, re-embark, re-emerge, re-charge (in battle), re-enter, re-dress, re-marry, re-appear. But there are no *recome, *relie, *resmoke, and words like rebecome, remeat, respeak, rego, re-appear have not gained general currency. Reawake(n) 1831 is common, though.

3.51.6. The prf is, as a matter of course, found with deverbal sbs. A few instances are re-arrangement, re-appointment, re-delivery, re-election / remake (not in OED or Spl.), retake, rerun, recount, refill, resale, rehash, rfit. These sbs are partly mere nouns of action, partly coinings on the basis of an adjunct/primary group, analysable as 'new or fresh ...' (so in recount, refill and the Law terms below). The type has, however, a certain degree of independence
insofar as such sbs are coined regardless whether a vb is actually in existence. There is no vb going with re-carriage 'conveyance back'. Rebirth was coined after the pattern of renaissance, revival and therefore originally stressed on the radical, whilst the pronunciation with stress on the prf is also heard now (though the OED does not mention it), and is regular with monosyllabic bases.

A number of sbs are legal terms. This use is based on French resp. Law French. Ultimately they are all deverbal sbs though not always from the viewpoint of English wf. Examples are resummons 'a second or renewed summons' (now only a historical term) 1495, rechange in obs. sense 're-exchange on a bill' 1487, repleader 'second pleader' 1607, redraft 1682, retrial, redemise 1797, reinsurance 1799.

3. 51. 7. The pronunciation of the prf in the types discussed is [ri]. In vbs, the main stress is on the radical, but the prf has a heavy middle stress. With deverbal derivatives the stress pattern is originally the same, but with disyllabic sbs there is now a stronger tendency to stress the prf: a réfund, retour (of tax surplus), a réfit, a réflit, a rédraft, a récount etc., esp. when the sbs are analysable in the sense of 'new ...'.

As the pronunciation [ri] is derivatively relevant, deviations from it are negatively characteristic: we find the pronunciation [ra] with words which are loans, chiefly from French. Replace 1595 is F replacer (not re- plus place, as OED says), repay 1530 is F repayer, regain 1548 is F regagner, recurve 1597 'curve back' is L recurvare. Renew is OF renover, refashioned after new, re-bound 'spring back' is OF rebondir, recoil is adapted from OF reculer. A few words have a non-French root, as remind 1645 which is re- plus mind 'remind', but influenced by remember. Recall 1575 is coined after reclaim (= OF reclamer). On the other hand, there are a number of original loans which are now apprehended as Ec and pronounced [ri] accordingly, as re-enter, refigure, recharge, re-establish, recommence a.o.

For the sake of contrast I give a few spelling doublets, the first being the English prf coining, the second a loan word (with re- pronounced [ri], sometimes also [re]): re-act/react, re-cede/recede, re-count/recount, re-cover/recover, re-create/recreate 'refresh', re-form/reform, re-lease/release, re-sound/resound, re-trace/retrace, re-view/review, re-store/restore.

3. 52. retro- /'ritro/

is a scientific prf, forming 19th c. words with the meaning 'backwards, back, situated behind'. It is attached to Latin stems (though some of these are ultimately Greek).

In AL we find retro- in Quintilian, Livy, Seneca, Pliny and later writers with vbs of the 'move' class such as retro-ago, -eo, -cedo, -gradior, verto and their derivatives. Medieval Latin adds a few words. Most of them occur in English as adapted Latin: retrograde adj (close of the 14th c.), retrograde vb, retro-gradation, -cedent (16th c.), retro-active, -cession, -gession, -spection, -cede, -vert (17th c.), retro-flex, -act, -action, -version (18th c.), retro-gress, -gressive, -flection (19th c.).

The 19th c. coined many scientific words such as retro-cognition, -migration, -reception, -susception, -transference, -vision, -copulation, -vaccination, -cognitive,
-operative, -fracted a.o., also a few others, as retrodate ‘date backwards’, retro-seer, retro-coupling (bee boxes) which are, however, unusual.

In pathology and anatomy retro- forms parasyntihetic adjs of the type retroocular ‘situated behind the eyes’, thus partly competing with meta-. Examples are retro-mastoid, -buccal, -frontal, -renal, -maxillary, -sternal, -tarsal, -uterine.

With the words coined in the 19th c. on a NL basis the prevalent pronunciation is [ritro]. The older set of adapted Latin words have often [retro], but under the influence of derivative retro-, the pron. [ritro] is growing in frequency.

English new formations have the main stress on the radical, the prf having a heavy middle stress. The adapted Latin words are, on principle, non-composite cbs from the viewpoint of English wf and are stressed in various ways which we need not discuss in a chapter on wf.

3.53.1. semi- /ˈsemi/ is ultimately L semi- ‘half, partly’, used as a prf with adjs and sbs. The AL types are semiacerbus, semi-digitalis, semi-amputatus / semi-bos, semi-hora. The types, chiefly the adjectival ones, grew considerably in LL and ML. In MoL, semi- forms many scholarly and scientific words. In Chaucer’s time we find the first semi- words in E, chiefly adapted Latin words. The earliest are semi-cope ‘short cloak’ (Ch.), semi-bousy ‘half boozy, half drunk’ c 1400, semi-god (tr. L semideus) 1417, semi-cicle ‘a half sicla’ (ML sicla ‘a liquid measure’) c 1440.

The 18th and 19th c. contributed terms used in natural history, while mathematical and astronomical words occur as early as the 17th c., a few even in the 16th c. Architectural words are 18th c. and later; words belonging to philosophy and religion are 17th c. Adjectives denoting periodical recurrence, also used as sbs denoting periodicals, belong to the 19th c., as do terms of commerce.

3.53.2. Semi- has chiefly been prefixed to Latin stems, obs with native roots being infrequent (they belong to the 19th c. with the exception of semi-god). The English types are 1) semi-fluid (adjs of Latin origin), 2) semi-dry, semi-weekly (adjs of native origin), 3) semi-attch, semi-fitting (participial adjs), 4) semi-state affairs (preadjunctal sbs), 5) semi-allegiance, semi-dome, semi-cone (impersonal sbs), 6) semi-barbarian, semi-ape (sbs denoting living beings).

In general usage the prf is found with a few words only. Their character is learned or technical though the words are used by a wider public. Examples are semi-official, -occasional, -final, -Arian, -Pelagian, -colon, and the ‘periodical’ words (see below). The proper domain of semi- is the formation of technical terms of all kind: music (semi-quaver, -breve etc.), mathematics (semi-axis, -angle, -base, -difference, -infinite, -sum etc.), astronomy (semi-sextile, -quintile, -square etc.), natural history (semi-annular, -coronated, -coronet, -fascia, -ring etc.), religion and philosophy (semi-Pelagian, -Arian, -Darwinian, -infidel etc.), building and architecture (semi-arch, -beam, -column, -shaft, -engaged etc.), anatomy, chiefly names of muscles, used in NL form (semi-membranosus,
-orbicularis etc.), commercial production (semi-china, -porcelain, -steel etc.) and other spheres (see OED).

The meaning of semi- words is 'half, incomplete, partly ...'. The exact meaning 'half' is found in musical, astronomical, mathematical and natural history terms, also in words which express measure (for time, space or the like). Otherwise semi- conveys the shade of incompleteness, approximateness.

3.53.3. Here are some examples according to the numbering above:

1) semi-arid, -automatic, -conscious, -cordate, -divine, -elliptical, -formal, -Gothic, -invalid, -liquid, -lanceolate, -mute, -nude, -official, -opaque, -permeable, -rigid, -solid, -transparent etc. etc.

2) semi-skilled, -hard, -mild (said of steel). The type is more in use with adjs denoting periodical recurrence, in which semi- implies that the period is halved. The meaning of the cbs is 'twice a ...', as in semi-weekly, -daily, -yearly, -monthly. Also cbs with Latin roots occur, after semi-annual, as semi-centennial, -millenary, -horal, -mensal.

3) semi-attached, -civilized, -coagulated, -detached, -developed, -domesticated, -educated, -enclosed, -engaged, -Romanized, -vitrified. With first ptcs semi- is not often combined. Examples are semi-drying, -fitting, -floating.

4) The use of semi- with preadjunctal sbs is chiefly 19th c. (semi-vegetable diet is recorded from 1780), as semi-state honors, semi-cotton derivation, semi-dress landau, semi-Empire shape, semi-gala carriage, semi-Patriot ministry.

5) Abstract nouns are semi-allegiance, -acquaintance, -barbarism, -independence, -intoxication, -loyalty, -monopoly, -narcosis, -obscurity, -paralysis, -starvation. Concrete nouns are semi-arc, -arch, -column, -ellipse, -dome, -beam, -shaft, -steel, -china, -porcelain. Words for geometrical forms derived by bisection are semi-cone, -cup, -disk, -egg, -hexagon etc. There are also other mathematical terms implying bisection, as semi-angle, -base, -circumference, -circumlocution, -quadrangle, -segment etc.

6) Words denoting living beings are semi-barbarian, -Christian, obs. semi-proselite 1622 / semi-ape, -nymph.

The prf has the main stress in cbs with monosyllabic or disyllabic sbs, as semi-tone, semi-vowel. In all other cbs, including adjs used as primaries (semi-barbarian, semi-weekly etc.), the main stress is on the radical, while the prf has a heavy middle stress.

3.54. step- /step/

is a prf exclusively used in terms of relationship, connoting that the respective degree of affinity is not a natural one but caused by remarriage of a parent. This use is already OE, and the prf has counterparts in all Germanic languages. Examples are stepfather, stepmother, stepchild, stepson, stepdaughter (all OE), stepbrother, stepsister (1440).

The prf step- has the same root as OE astiepan 'bereave' and OHG stiufen 'bereave'. OE steopbearn, stepcild also meant 'orphan'. A stepfather is therefore prob. a father to a bereaved, but the bereavement may extend to one parent only. For various uses of step- in the 16th and 17th c. see OED s.v. step-.

The prf always has the main stress.
3.55.1. sub- /səb/

is a nominal and verbal prf meaning ‘under, below’. It represents L sub-, a strong verbal and nominal prf already in the classical period.

The first type to be imitated in English was the type sub-editor. Cbs of this type have the meaning ‘subordinate ...’. The type is not used in CL (but Plautus uses subcustos ‘subwarden’). Late Latin has many new formations such as submagister, subcurator, subdiaconus, subregulus etc., and in ML we find many more, as subprior, sub-bedellus, sub-secretarius, sub-bailiffus. The first English words occurring are loans from OF, as subdean 1303 (= OF soudiakene, sudiene) recorded in the forms sudeakne, sodeken, subdeken, subdecon; subprior 1340, subdean 1362 (= OF suzdeien, soubdean) recorded in the forms sodene, sudene, subdene. These forms as well as the OF originals show vacillation between the popular development of L subitus which resulted in sous, sou and which is a separate prf in French, and learned influence of L sub- words which kept growing in Medieval Latin. In English, the decision has been in favor of Latin usage right from the beginning. Subtenant 1445 is an early coigne, other cbs follow in the 16th c. only. They all denote the holder of a position, chiefly an office, as sub-constable 1512, sub-chanter 1515, orig. ‘a precentor’s deputy’, subhead 1588 ‘one next in rank to the head of a college etc.’, sub-treasurer 1540, sub-marshals 1594. The full growth of the prf developed, however, in the 17th c. From the 17th c. on we find many cbs, such as sub-almoner, sub-agent, sub-commissioner, sub-chamberlain, sub-delegate, sub-governor, sub-lieutenant, sub-officer, sub-postmaster, sub-prefect, sub-rector, sub-vicar, sub-warden etc. PE words are all administration and office terms.

A few personal cbs have been coined outside the preceding group, as sub-customer 1580, sub-farmer, sub-antichrist, sub-searcher, sub-fool, sub-patron (all 17th c.), no longer in use today, and there is the recent coigne subman 1921 (as opp. to superman).

3.55.2. The type sub-division is the type for non-personal cbs. No words occur in CL, in LL I find subdivisio (i.e. as an adjunct/primary group, not as deverbal sb). English adopted the word as subdivision 1553 and formed other cbs on the pattern, chiefly words with the basic meaning ‘division’ and most of them terms of natural history. Examples are sub-distinction 1655 H, sub-committee 1610, subsection 1621, subdialect 1643, subspecies 1699. Most of the cbs of this type were, however, formed in the 19th c. or later, as sub-class, sub-family, sub-genus, sub-kingdom, sub-variety, suborder, subgroup / sub-tribe, sub-denomination, subclassification, sub-branch, sub-title, sub-base, sub-arch, sub-district, sub-continent / sub-office, sub-bureau, sub-lease, sub-contract a.o.

3.55.3. Type subway. The type word is recorded from 1828. Other 19th c. cbs are sub-railway, sub-current, sub-crossing, all with the meaning ‘... lying underneath or below’. Older are sub-trench 1669, substructure 1726, subsoil 1799, subsurface 1778, the last two obviously after substratum (= NL sub-stratum) 1631.

3.55.4. The type sublingua ‘part situated under the tongue’ forms cbs used in anatomy and biology. Classical Latin does not know the type, cbs
of this relational basis being formed with the derivative ending -ium, as *suburbium* 'suburb', *subbrachia* 'armpits'. It is a type Neo-Latin created, and in English the terms are used in their NL form, as *submentum*, *subumbrella*, *suboperculum* etc.

3.55.5. Type sub-audible. AL prefixed *sub* to adjs, as in *subabsurdus*, *subacer*, *subagrestis* etc. etc. which have the meaning 'somewhat or not quite ...' '...ish'. English has imitated the type, originally only with adjs denoting color, as *sub-pale*, *sub-red*, *sub-goldish*, *sub-iridescent*, *sub-ruful (= L *rufus*), all 16th c., *sub-albid*, *sub-rubeous*, *sub-luteous*, *sub-virid* (17th c.). Cbs with other adjs occur from the 17th c. on, as *sub-angelical*, -*divine*, -*canonical*, -*rustic*, -*rosid*, -*saline*, -*dulcid*, -*acid*. Most of the PE words, chiefly adjs used in geometry, medicine and natural history are, however, due to the 19th c. Only terms of geometry are found from about 1750 on. Examples are *sub-cylindrical*, -*angular*, -*spherical*, -*pentagonal*, -*triangular*, -*oblong* / *sub-febrile*, -*acute*, -*chronic*, -*continued* / *sub-acminate*, -*ovoid*, -*globose*, -*metallic*, -*incandescent*, -*obscure* / *sub-brachycephalid*, -*dolichocephalic* 'having an index next below the brachycephalic' etc.

Neo-Latin uses the corresponding parasythetic adj type *subungulata* in zoology to denote divisions of animals where the '...' is imperfectly developed. English preserves the Latin form.

3.55.6. In chemistry we have words coined on the type *subacetate* in which the *prf* has the shade it conveys to adjs. Names of compounds of this type signify 'having less than the amount normal in ...', 'basic ...', as *sub-carbide*, *sub-nitrate*, *sub-sulphate*, *sub-salt*.

3.55.7. The type *suborbital* 'situated under ...', 'found near ...' is chiefly used in terms of anatomy, geography and geology, but also in various other scientific domains. In AL there are many words such as *subocularis*, *sublucus*, *sublunaris*, *sublunaneus*. Beginning in about 1550 English adapted many Latin words such as *subcelestial*, *sublunary*, *subterranean*, *subcutaneous* a.o., but from about 1600 on, anatomical terms have been freely coined, such as *subrenal*, *subclavian*, *sublingual*, *submucous*, *submaxillary* (17th c.), *subcostal*, *subspinal*, *subocipital*, *subaxillary* (18th c.), *suborbital*, *subcentral*, *subacapular*, *sub-brachial* (19th c.). Terms of geology and geography are *subaquatic*, *subolar*, *submarine*, *subglacial*; to the domain of psychology belong *subsensorial*, *subsensible*, *subconscious*, *subliminal*, *subnormal*; to the field of botany words such as *subcortical* and *subpetiolar*, an economic term is *submarginal*; words from the nomenclature of music are *subtonic*, *subdominant*, *submediant*.

3.55.8. From the 19th c. on, we have *sub-* prefixed to preadjunctal sbs, as orig. with genuine opds *subsurface* *waters* 1778, *subsoil* *plow* 1831, then extended to cbs like *subcaliber* *projectile*, *sub-standard* *merchandise*, in which the prefixed sb does not exist as such.

3.55.9. Prefixed vbs are *sublet*, *subdivide*, *subclassify*, *sublease*, *subcolonize*, *subculture* etc., meaning '... so as to form a further unit of division'.
3.56.1. super- '/sjupə(r), 'supə(r)/

forms words with the basic meaning 'over, above'. It represents L super-
which coined words after the following types: superambulo 'walk about,
over', superaddo 'add on top of something', supervaleo 'over-value',
super-laudabilis (-excellens, -exhaustus) 'exceedingly ...'. All these types
are LL though C1 has a few supert-vbs, as superaddo, superimpono and some
more. The parasythetic adj type super-mundialis 'situated beyond ...' is
Ecclesiastical Latin. The type super-aedificium 'overlying ...'(in locative
sense only) is LL. In ML the type super-altare 'that which is placed over ...'
arises (a type not imitated in English).

From ME on we have loans from Latin such as superabundant, super-
abundance (ME), superadd 1458, super-abound 1447, super-excellent 1561,
supernatural 1526, super-celestial 1559. Of English coinages, the word superfine
1575 appears to be the oldest word recorded; other adjs follow in the 17th c.,
as super-serviceable 1605, super-royal 1612, super-sensual 1685, superlunary
1614 (after sublunar), superterranean 1691 (after subterraneum). But otherwise
it is chiefly in the 19th c. that super- becomes an English formative. It is used
in the phraseology of anatomy, botany, chemistry, medicine. Recently it
has also invaded the jargon of record-hunters in business, films and industrial
production. The following is a description of the English types and their uses.

3.56.2. The verbal type super-saturate '...to excess' is weak. We find such
vbs as super-heat, -cool, -saturate, -accumulate, -exceed, -extoll, -reward, but the
usual particle is over.

The type super-irritation 'excessive irritation' forms medical terms such as
super-secretion, super-alkalinity, super-pigmentation. In general use are
words like super-activity, super-infirmity, super-conformity.

The type super-sensitive 'excessively ...' is the corresponding adjectival
type. Examples are super-fine, -serviceable, -subtle, -infinite / super-refined,
-charged, -civilized, -elated, -peopled / super-acid, -carbonated, -oxygenated (in
chemical use).

3.56.3. The type super-sensual 'being above or beyond the range etc. of ...'
has formed words like super-terranean, -intellectual, -organic, -physical, -rational,
-regal, -secular, -sensible, -conscious, -normal, -sonic, -audible.

There are a few vbs with super- prefixed to a preadjunctal sb on the same
prepositional basis 'more than, higher than ...', as superstandard risk,
supergraduate work, superseaman efforts. The type appears to have arisen in
the 80's.

The type super-orbital 'situated above or on the dorsal side of ...' is
the locative counterpart of the foregoing type. It has formed adjs used in
anatomy, zoology and various other branches of science. Examples are
super-acromial, -central, -glottal, -occipital, -renal / super-aerial, -linear, -marine,
-arctic, -glacial. The implication is sometimes 'situated in or forming the upper
part of ...', as in super-cerebral, -cerebellar, -temporal (which are, however, less
common than supra- words).

3.56.4. The type superstructure corresponds to the L type super-aedi-
ficium. The meaning is 'over ...', 'overlying ...' in super-stratum, super-tunic,
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'superposed . . .' in super-commentary, - parasite, - reformation, 'additional' in supertax, 'upper part of . . .' in anatomical terms like super-maxilla, - sulcus, - fissure. It is rare with words of a more general character where the implication is that of surpassing in status, as in super-arbiter, - Caesar, - sovereign, - septuagenarian.

3.56.5. On the other hand, the prf has acquired a shade of superlativity in the type superman ' . . . surpassing any of its kind', as in super-state, - brute, - critic. The recent jargon of business propaganda and the language of press agents has created such words as super-film, - production, - dreadnought, - market, - cabinet, - criminal, - gang, - service. They are coined ad libitum (see MeAL, 181 and Spl. I. 372).

3.56.6. In the nomenclature of natural history we have the type super-family 'group or division next higher than . . .', as in super-order, - species, - suborder. The type is parallel to the one with sub-. On the same basis are formed other technical terms such as super-cube, - curve, - line, - molecule where the implication is 'one degree beyond . . .'. A little different are supersalt and superphosphate with the meaning 'containing an excess of acid'.

3.56.7. The AL type superambulare has produced a few deverbal coinages on a Latin basis, as supercrescence 'parasitic growth', supersaliency 'the leaping of the male for the act of copulation', supercolumniation 'the erection of one order of columns upon another', anglicized Latin ptc's like supersalient, supernatant, superjacent, supercrescent and some more.

Supercargo 'an officer on a merchant ship' is a rendering of Spanish sobrecargo the earlier E form of which was supracargo.

3.56.8. Cbs based on an adjunct/primary relation usually have the main stress on the prf, a heavy middle stress on the radical i.e. contrastive accent prevails. Under this pattern fall words of the types superstructure, superfamily, superman. Cbs of other types have the main stress on the radical and a heavy middle stress on the prf. This pattern is followed also by derivatives from the respective types: super-sensitivity follows super-sensitive, super- irritation (though apparently also analysable as adjunct/primary group = 'excessive irritation') is treated as a derivative from superirritate where the prf has adverbial force.

3.57. supra- /'sjupra, 'supra/

is in most of its functions the weaker rival of super-. It is ultimately L supra 'over, above' which is a weak verbal prf in Late Latin (suprafundo 'pour over', suprascibo 'write above', suprafatus 'above-named' and a few more). Modern Latin developed the parasynthetic adj type su pra- a xillaris 'situated above the axilla' which is the only type freely used for new formations in English. There are a few words from the 17th and 18th c., as supra-mundane, - lunary, - aerial (17th c.), supra-lunar, - spinal (18th c.), but most of the cbs in use date from the 19th c., chiefly terms of anatomy and zoology, coined like supra-abdominal 'situated above . . . or on the dorsal side of . . .', as supra-acromial, - anal, - renal, - scapular, - clavicular, - occipital, -ocular / branchial, - trochlear, - foliar, - glacial, - coralline, - marine etc.
The implication is sometimes 'pertaining to, situated on, forming the
upper ... or upper part of ...', as in supra-labial, supra-maxillary. Cbs
of this group are the only ones that are more common than parallel super-
formations.

Parallel to super-sensitive we have the type supra-sensitive, parallel to
super-saturate there is the type supra-saturate, while super-sensual is matched
by the type supra-sensual. Parallel to words like super-maxilla we have supra-
maxilla and other cbs.

3. 58. sur- /sɜː(r)/

has formed very few words. It represents F sur- (which goes back to L
super-). The only word in common usage is surname ME which is a rendering
of F surnom. Other words are surcoat ME, orig. also a French word (surcot),
surmaster 1512 'the title of the second master at St. Paul's school, London',
the architectural term surbase 1678 'a border above the base', the legal terms
surrejoinder 1542 and surrebutter 1601 with the meaning 'answer to ...'.
Surtax 1881 'additional tax' may be another coinage if it is not merely a
rendering of F surtaxe.

With the exception of the two legal terms which are stressed on the radical, sur-
cbs have contrastive stress on the prf and a middle stress on the radical.

3. 59. 1. trans- /træns, trans/

is a prf of Latin origin and forms words on Latin patterns. The respective
Latin types are transrhenanus 'situated on the other side of the Rhine' and
trans-formare 'change the form'. English has imitated these types
since the 16th c., but the majority are 19th c. or later.

3. 59. 2. The type transatlantic 'lying beyond the Atlantic' is the strongest
in English. It is impossible to decide whether the older cbs are anything more
than anglicized Latin, as the parasynthetic adj type was strong in Latin.
Trans-marine 1583, transalpine 1590, transpadane 1617, transmontane 1727,
transfluvial 1806 have attested Latin originals, but more recent coinages are
usually prefixations of English adjs, as transatlantic 1779 and newer transarctic,
transsequatorial, transisthmian, transpolar, trans-Andean.

3. 59. 3. From about 1850 on we have trans- prefixed to pre-adjunctal cbs,
as in trans-frontier, transborder, trans-Mississippi, trans-Ural, trans-Baikal
(district or the like).

Parasynthetic adjs from territorial names may have the meaning 'passing
across or through ...', as in trans-American, trans-African, trans-Siberian,
trans-Canadian, trans-Balkan, trans-world (railway, airline or the like). The
semantic nuance of this group is not Latin. In English it is rare before 1850. Transalpine early developed the meaning; but there are only two quotations
in OED, one from 1654, another from 1744.

In terms of anatomy the meaning is 'crossing ...', as in transfrontal, trans-
apical, transocular, transuterine.
In learned words of a more general character we find the meaning ‘transcending, surpassing . . .’, as in transconscious, transempirical, transexperiential, transfinite, transhuman, transmaterial, transmental, transnormal, transrational, transsubjective.

3. 59. 4. With vbs, trans- is less frequent. Transform, transfigure, transfigurate are ME loans (French and Latin) analysable as ‘change the . . .’. Transelement 1567 represents ML transelementare, but from the second half of the 16th c. we may consider trans- a derivative morpheme with de-substantival verbs. Examples are transnature 1567, transshape 1575, trans-fashion 1601, transplace 1615, translocate 1624, transspeciate (fr. species) 1643, obs. transcolor 1664, transdialect 1698, transship 1792, transliterate 1861, transmake 1844. A little different is transprose ‘render in prose’ (under the influence of translate) 1671. Semantically the word transmogrify 1656 belongs in this group, but etymologically it is prob. a blend of transmigrate and modify. Transilluminate 1900 ‘pass light through’ is obviously influenced by other Latin loans of the same semantic family (transparent, translucent, transplendent). This type is otherwise isolated in English wf. It is the type we have in transpierce 1594 fr. F transpercer and in the Latin type transmittere ‘send through’.

3. 60.  tri- /trai/

‘three’ represents both OGr tri- (as in trisyllabos, trichórdos) and AL tri- (as in triangulum, tricuspis). The majority of the English words, however, have a Latin root. As a derivative morpheme, English tri- is due to NL which made use of the particle, chiefly in the nomenclature of botany and zoology. The bulk of PE words are coinages made in the 19th c. Terms of botany and zoology are older (18th c.) and are partly adaptations of AL or OGr words. The chief type that has served for word-coinage is

tri-elementary ‘having three . . .’. Parasythetic adjs existed already in CL (tricornis, trifurcous, triformis), but the type tricameratus arises in LL (represented by words like triangular 1541, triangulate 1610). Examples are tri-ulate, -annulate, -bracteate, -dentate, -nervate / tri-adelphous, -sepalous, -stylous, -spermous (adj with Greek stems have -ous) / tri-consonantal, -central, -dimensional, -linear, -lingual, -nominal, -nodal / tri-elementary, -fistulary / trilobular, -filar, -macular, -rectangular / tri-valve, all coined on a Neo-Latin basis and all belonging to one or the other field of science.

The prefix does not derive on a native basis of coining proper. Combinations such as tri-monthly, tri-weekly ‘occurring every three . . .’, lasting three . . .’, and 19th c. words matching such with bi-, are not very common. Parasythetic adjectives like trifaced, trilegged are occasionally found in print, but they are hardly ever heard. The common type is three-faced.

In chemistry, tri- forms many names of compounds such as tri-chloride ‘a compound containing three atoms of chlorine together with another element or radical’, and parasythetic adjectives (of the type tri-elementary) like tri-ethylic ‘containing three ethyl groups’. For a detailed discussion see OED s.v. tri-.
meaning 'two' is a weak prf. Although it goes back to OE as the same element we have in twofold and arch. twibill 'axe', most of the cbs which are in (chiefly occasional) use today are 19th c. and later. Exs of parasynthetic adjs, the main type, are twi-coloured, twi-faced, twi-forked, twi-formed, twi-gated (the oldest cb rec. in OED, 1573), twi-pointed, twi-shaped. Minor types are illustrated by twilight 1420, arch. twibill 'axe' OE, twi-reason (Ben Jonson), twi-prong (Browning), twi-streaming ptc (Coleridge), twi-top hill.

In present-day usage such cbs are infrequent and have a literary tinge.

3. 62. 1. ultra- /ˈʌltrə/

is a prf both in scientific and general use. It is ultimately L ultra 'beyond'. Classical Latin does not use the particle for wf. In Late Latin we find ultramundanus, in ML ultramontanus and ultramarinus. These words were adopted in English as ultramarine 1598, ultramontane 1592, ultramundane 1656. But it is only in the 19th c. that ultra- becomes a formative in English, thanks to the extensive use of ultra- in NL scientific nomenclature. The meaning conveyed by the LL and ML adjs was 'situated beyond ...'. With it we have a few English adjs of the type

ultramundane, as ultra-terrestrial, -zodiacal, -Gangetic and a few more. On the other hand there are several scientific adjs, terms of physics, as ultra-red 'lying beyond ...', ultra-violet, ultra-microscopic 'lying beyond the range of the microscope'; with the meaning 'more than, exceeding the ...' we have ultra-brachycephalic, -dolichocephalic, -basic, -elliptic. A few cbs of a more general character, such as ultra-pecuniary, -human, -natural, -phenomenal 'transcending the limits of the ...', all 19th c., are hardly more than nonce-words. To express this shade of meaning, super- and trans- words are more common.

3. 62. 2. The most productive type, however, is the adjectival type

ultra-revolutionary 'to the extreme' which has formed such words as ultra-royalist, -radical, -religious, -orthodox, -liberal, -loyal, -confident, -credulous, -exclusive, -ambitious, -modest, -fashionable, -critical, -modern. The OED (s.v. ultra-) assumes that the type is due to the loans ultra-revolutionary and ultra-royalist, taken from French. Ultra-revolutionary 1793 is app. the first word of the group in English, while ultra-royalist is not quoted before 1818. Ultra-fashionable 1802 and ultra-affected 1819 can, however, hardly be due to the political term ultra-revolutionary. The origin of the English type is explainable without French influence on the basis of 'going beyond the ...'. But French usage has doubtless influenced the growth of the English type. Ultra-cbs become very frequent after 1830, i.e. after the adaptation of F ultra-révolutionnaire, -radical, -royalist. The shade of 'extremism' in the English cbs would also testify to French influence.

Several of the preceding cbs may be used as primaries; we also have derivative sbs such as ultra-educationist, -papist / -dandyism, -radicalism, -remuneration, -Pluralism.
3.62.3. A few words were coined on Latin ultra- phrases: ultracrepidarian
‘one who goes ultra crepidam, i.e. beyond his last’ 1819, ultrafidian ‘one who
goes ultra fidem, beyond mere faith’, ‘one who is blindly credulous’ 1825.
Semantically these words belong to the same group as the preceding cms. So
does, to a certain extent, the word ultramontane. From the point of view of
Italian catholics it had acquired the meaning ‘the catholics north of the Alps’,
whereas from the standpoint of Gallican and Protestant countries the impli-
cation ‘those extremists and zealots of papal hegemony’ developed. The first
quotation for this sense in the OED is from 1728.

3.63.1. un- /an/ (type unfair)

is a nominal prf with the basic meaning ‘not’. It goes back to the same
Indo-European root as OGr a-, an-, L in-, G un-. As far back as OE, the
prf was very productive, chiefly with adjs. There are about 1250 words re-
corded in OE, but most of them had disappeared by 1500, and only a few
have survived into PE. Of the exceedingly numerous coinages I give a small
list of exs only.

Simple adjs with a native basis are unclean, uneven, unfair, unmeet, unripe,
unwise (all OE), unafraid, unfit, unfree, unsmooth, un-British, un-English,
un-French.

The prf combines as freely with adjs of foreign origin: unable, uncertain,
uncommon, unequal, unsure, unsafe, unanxious, unartificial etc.

3.63.2. Derived adjs also take the prf. Deronvonal derivatives are chiefly
characterized by the sfs -ed (possessive adjs), -y, -ly, -ful, -al, and the semi-sfs
-worthy and -like. Other sfs are less common. Exs are:

unfathered, unhelmeted, unmannered, unprecedented, unprejudiced, unprincipled,
unprivileged, unroofed, unshingled etc. (16th c. and later),

unguilty, unholy (OE), unthrifty, unwealthy, unworthy, uneasy, untidy, unh-
appy (ME), unbloody, unlucky, unhealthy etc.,

unfatherly, unmotherly, unwomanly, unprincely, unpriestly, unshapely
(MOE),

unfruitful (1388), unarchitectural, unconditional, unconventional, uncircum-
stantial (MOE), unpraiseworthy, unseaworthy, untrustworthy (19th c.), ungente-
manlike, unsoldierlike, unladylike etc. (since c. 1550),

unwholesome, untoothsome, unadventurous, unceremonious, unselsh, un-
stylish, unpicturesque.

3.63.3. Deverbal derivatives are likewise common. They are all formed with
the sf -able. Exs of this very productive type, which arose in the 14th c., are
unbearable, unbelievable, unacceptable, unachievable, unadvisable etc. etc.

Of adjs derived from postpositional verbs (i.e. vbs followed by an unstressed
pt), one group drops the pt, as unavailable, unaccountable, unappealable, un-
reliable, unswimmable, another treats the pt as a kind of infix, as in uncome-
at-able, unget-at-able, with the main stress on the pt. Other coinages of this type
have a jocular tinge, as unreluyuponable, untalkaboutable. Adjs derived from
adverbial verbs (vbs followed by a stressed ptc) all have the character of indi-
vidual formations, as undryupable, uncomoverable, unkeepoff-able etc.
3.63.4. The prf has always been freely attached to participial adjs (first and second ptc). Exs are unbecoming, unbefitting, unbending, unerring, unflailing, unfeeling, unflagging, unrelenting, untiring etc., unbegun, unborn, unbought, unbound, unburied, unwounded (all OE), unarmed, unbacked, unbraced, unmasked, unseen, untouched, unstressed etc etc.

Postpositional vbs form adjs with the second ptc only: uncared-for, uncalled-for, unwished-for, unheard-of, unthought-of, unslept-in (16th c. and later, chiefly 19th c.). Adverbial vbs do not follow this type. The OED has an example from Caxton, unborne-away, which is, however, isolated.

3.63.5. There is a small group of derivatives from prefixed vbs. Almost all of them are second ptc, a few are formed with the sf -able. The prfs occurring are be-, dis-, em- / en- / im-, fore-, mis-, pre-, over-. All are MoE. Exs are unbeknown, unbeloved, unbespoken, undisbanded, undischarged, undiscouraged, undishonored, undisguised, unembittered, unembodied, enclosed, unendangered, unenriched, unmisguided, unpremeditated, unprepossessed, unprepossessing, unforeseeable, unforeseeing, unforeseen, unovercome, unoverthrown. The corresponding German type is much stronger: unerziehbar, unverziehlich etc etc.

3.63.6. Many adjs are synthetic formations, i.e. their unprefixed counterparts do not exist. Many participial adjs are formed this way, as unassuming, unflinching, unwincing, unbending, unrelenting, untiring (tiring is not the opp. of untiring), unending a.o. Unabashed, unseen, untouched etc. Possessive adjs with un- are likewise more frequent than unprefixed ones. We have unexampled, unparalleled, unprecedented, unprincipled, unmannered, unpriced etc., but not the positive counterparts as real adjs.

3.63.7. The positive counterparts of some words have become archaic, obsolete or unrecognizable: unkempt (kempt ‘combed’ is now dial.), uncoth (couth is orig. the second ptc of OE cunnan ‘know’), untoward (toward is arch. now) are instances of such a development. Unruly 1400 is perh. a synthetic formation, though the word ruly is also recorded from 1400.

3.63.8. There are adjs to which un- is not prefixed, as good, bad, broad, narrow, strong, weak, deep, shallow a.o. The OED restricts the non-application of the prf to short adjs of native origin, but it is neither a question of shortness nor of native or foreign origin that explains this phenomenon. The above adjs stand for primary qualities which are not expressed by relational words. A cb like ungood would imply that the speaker saw ‘bad’ as the contradictory opposite of ‘good’ which he does not. The contrast is one of contrary opposition, and the words expressing the respective notions are coined as individual, non-relational words. We observe the same phenomenon in the name-giving for male and female sex, to mention an exact parallel. As for shortness, we do in fact use unfair, unsroom, unfit, unfree, unkind, unwise, unripe, unclean, unfresh (in Somerset Maugham’s short story Rain, used of linen), so shortness does not hold good as an explanation. And with certain pair notions, contradictory opposition appears to be the only way of expression. In English, French, German, Latin, Italian, Spanish, Turkish, the words just and ripe (and the resp. words in the other languages), for instance, are not matched by
terms of contrary opposition, but by words which are contradictory opposites. Other notions that seem to call for contradictory opposition are those under-lyi the words *able, apt, capable, practical*. Contrastive instinct plays an important part here. The word *unjust* describes a judge more clearly than any contrary opposite might do. On the other hand, contradictory opposition leaves many possibilities open which a contrary term would not.

According to the OED *un-* was more frequently prefixed to short adjs in the EMOE period where we find *unbroad, undeep, unbold, unglad, ungood, unstrong, unwwhole, unwide*. The character of these cbs would, however, have to be investigated.

On the other hand, no contradictory opposites, i.e. no *un-* words, are formed from such adjs as in themselves denote the absence of something, as *bad, evil, wicked, naughty, bare, naked, empty, silly, foolish*. Natural linguistic instinct would not make the sophisticated detour of negativ ing a negative to obtain a positive. That adjs denoting colors should not take the prf either is likewise self-evident, as colors denote concrete qualities for the eye. We could not describe or qualify a thing by negatively saying that it is not white or red.

3.63.9. As for the competition of *un-* and *in-* see in-. On the whole, *un-* has proved the stronger prf, but there are also cases where the *un-* words have passed out of use: *uncredible, unef fable, unexcusable, unexpert, unperfect, unpit eous, unpossible, unformal, unglorious, undubitable, unfirm* have been replaced by *in-* forms, but *dishonest* has taken the place of *unhonest*.

3.63.10. Derivation from compound or parasynthetic adjs is uncommon. A few have general currency, as *unself-conscious* 1866, *un-commonplace* 1873, but others are more or less nonce-words, as *un-booklearned, un-cross-examined, un-cross-examinable, un-mouse-eaten / un-birdlined, un-landmarked, un-pad-locked or technical terms like *unequal-lengthed, unequal-sided / unbusiness methods, unsociety people, un-birthday present (= un- prefixed to a sb used as preadjunct)*.

3.63.11. Prefixed sbs have always been less numerous than adjs (the corresponding German type is much stronger). With a very few exceptions, only abstract sbs occur. The prf conveys the meaning 'lack of ...', absence of ...'. Exs are *unhealth, untruth, unwisdom OE, unlaw OE-1609, rev. 19th c., unpeace arch., unscience ME*. But other words which are used today, were coined in the MoE period, many of them in the 19th c.: *uncircumcision, unsucces (16th c.), unculture, unintelligence, uninterruption, unobservant, unsatisfaction (17th c.), unacceptance, uncandor, unharmoney, unheroism, unluck, unpatriotism a.o. (19th c.)*.

There are countless sbs in -ity and -ness, as *unaccountability, unamiability, unreadability, unworkability* etc., *unaccountableness, unacquaintedness, unaffectedness, uncheerfulness* etc. (the latter group is usually older) which must, however, be analysed as derivatives from negative adjs.

Non-abstract are *unbeliever (after unbelieving or unbelief), undeserver (after undeserving), unfriend, now chiefly 'a non-Quaker', unlady*.

3.63.12. The prf is not attached to vbs. The OED has a few back-derived vbs which were in use in the 16—17th c., as *unknow (f. unknowing), undeserve*
(f. undeserving), unbecome (f. unbecoming), unbeseem (f. unbeseeing). In OE there were a few vbs derived from negativized adjs, as unclēnsian (f. unclēne), untrumian (f. untrum). In ME some more were coined, as untrowen ‘disbelieve’ a 1200, untrust ‘distrust’ a 1225, unbe 1434, unbetide ‘not happen’ 1374 which have not survived. For some time (chiefly 16th and 17th c.) un- was used with an intensifying function with adjs in -less, as unboundless, uncomfortless, undauntless, un-effectless, unhelpless etc. (see OED). The prf has a heavy middle stress, with a growing tendency towards (emphatic) full stress. In attributive position, adjs take the main stress on the prf (as an unbørn child).

3. 64. 1. un- /an/ (type unbind)

The prf is generally said to go back to OE and-, ond- which corresponds to G ent-, ultimately identical with OG r anti and L ante, orig. ‘opposite’. This explanation cannot be entirely correct. It is certainly striking to observe that in OE the prf formed a great number of vbs, but that of the whole group only a few survived into ME, the PE vbs unbind, undo, unfold, unknit, untie, un-yoke. In others the prf is no longer recognizable, as in abide (f. onbidan) and answer (ondswarian). Before consonants the prf was generally reduced to on- which was further weakened to a- and finally dropped. We note that only in a small number of OE vbs did the prf have the meaning of PE un-. Beside the reversible sense, it conveyed an inchoative nuance (as in onginnan ‘begin’, onslēpan ‘fall asleep’), a perfective nuance (as in ongietan ‘understand’, onliesan ‘redeem’), a separative nuance (as in onsendan ‘send forth’, onspringan ‘spring forth’). The PE reversible shade is found in onwindan ‘unwind’ (un-wind was coined anew in ME), onlūcan ‘unlock’ (unlock was coined anew in LME), unhlidan ‘unlid’ (unlid was coined anew in ME), ongierwan ‘undress’, the before-mentioned unfealdan, ungirdan, uncnytitan, ungocian, unbindan, undōn (andōn, ondōn), untīgān (ontīgān) ‘unfold, ungird, unknit, unyoke, unbind, undo, untie’. We notice that on- had given way to un- as early as OE, which certainly does not mean a mere spelling variant. Possibly starting from second ptc forms, the prf on- had come to be felt connected with the negative prf un-. The idea of negativity is common to both (cp. for a parallel case the prf dis-). What distinguishes unbound ‘not bound’ from unbound ‘loosened’ is only the additional idea of an action preceding the state of being loosened, but the state itself is the same. It is therefore, I think, on account of this semantic connection that on- did not die out like so many other OE prefixes, but, on the contrary, became a productive verbal prf. Its semantic range is smaller than that of the corresponding G ent- which developed the various functions OE and-, ond- had (see above; for the use of ent- see Wi 111/118).

3. 64. 2. The prf reverses the result of the action expressed by the simple vb. This explains why almost all prefixed vbs are transitive or transitively used. The phenomenon is parallel to the one we observe with re-, the latter expressing a double undoing, so to speak. Sometimes the grammatical object is not expressed but merely implied, as with uncoil, undress, unmarrry which have
a zero object. The following is a short list of reversative verbs coined since the Middle English period.

Before 1500 are recorded unbutton, unblindfold, unbolt, uncharge, unclench, unclothe, uncover, unfasten, unjoint, unlace, unlade, unlearn, unlid, unlock, unmake, unmail, unpin, unroll, unsay, unsheathe, untwine, unwind; from the 16th c. are recorded unbewitch, unblest, unblind, uncharm, unclasp, unconsecrate, uncross, undecieve, undress, unfreeze, unglue, ungum, unknow, unknot, unrive, unload, unmarry, unriddle, unnarl, untackel, unteach, untwist, unweil, unwish. In the 17th c. we find unblock, unbeget, uncivilize, unclew (unclue), undraw, unfurl, unlatch, unlink, unmould, ummount, unravel, in the 18th c. uncoil, unlay ‘untwist a rope’. Later are recorded unclamp 1809, unwrite 1820, unyear 1828, unwhich 1862, unstick 1913, unfreeze (capital, credits) 1947 (q. Za 115).

3.64.3. With nominal vbs the implication is ‘remove, release from . . .’, or ‘deprive of . . .’. Denominal vbs existed in OE (as in OHG), but the type was weak. We find ungeocian ‘anyoke’, unhādian ‘deprive of ecclesiastical orders’, unhlidian ‘remove the lid’, unscōgian ‘unshoe’ (recoined in the 15th c.), uninseglian ‘unseal’ (unseal is 15th c.). Late Middle English are unhhouse, unbrace, uncouple, unearth, unroot, unship. The growing possibilities of derivation with a zero morpheme have obviously favored the development. From the 16th c. are recorded unbosom, unbody, unburden, unbreech, uncloak, uncloud, unbit ‘free a horse from the bit’, unperch, unhood, unkennel, unstock ‘remove a ship from the stocks’. From the 17th c. we have unhand, unbag, uncage, ungrave, unhinge, unhook, unsphere (as stars), unpile. In this group the meaning is ‘remove, release from . . .’. A variant of this meaning is the sense ‘deprive, strip of . . .’. Whether the analysis should be one or the other is not always clear; unhhouse, unhorse, unharness, unsocket and others admit of either analysis. I will give a few instances in which the analysis is more or less clearly ‘deprive, strip of . . .’: unhair, unhead, unshoe (15th c.), unboot, unbalance, unparadise ‘expel from p.’, ungirth, unharrow, unheart, unlead, unwantle, unmash (16th c.), unbed, uncurtain, unballast, undoel, unessence, unfrock, unnerv (17th c.), unguard (15th c.), unshawl, unbonnet (19th c.), unwizard 1911, unsight 1923, uncharter 1928.

3.64.4. The implication is sometimes ‘deprive of the character or quality of . . .’, as in unvoice (in phonetic use), unsin, unsex, deadjectival unquiet (15th c.), unround, unsmooth, uncalm (all 17th c.), untidy (1891). The vbs with an adjectival root are perhaps partly converted negative adjs. Undouble is certainly the reversative of double, unround as a phonetic term the reversative of round. Derivatives from adjs are rare, anyhow.

Vbs having a personal sb for a basis often have the privative meaning of the last group, as unpriest 1550, unpope 1563, unkings 1578, unbishop, unman 1598, unchild 1605, unknight 1623, unbrother 1634, uncardinal 1642, ungentleman 1671 with meaning ‘deprive of the character, status, quality, or title of . . .’. With the exception of unman, however, none of the verbs is in common use.

3.64.5. From about 1600 on we find parasynthetic vbs in -ize (also in -ify). Exs are uncivilize, uncanonize, unnaturalize, unbarbarize (first half of the 17th
c.), unchristianize, unhumanize (18th c.) / unsanctify 1594, undeify 1637, undignify 1707, unglorify 1740. OED (s.v. un\(^2\) - 6 c) has many 19th c. formations (chiefly in -ize). But the number of dictionary entries is no proof of the frequency of these words which are all uncommon. The relevant derivational type is de-militarize. Second participles, as uncivilized, undignified, do occur, but they have to be analysed as adjectives of the type un-pleasant.

Occasionally un- redundantly intensifies vbs which have in themselves a privative meaning, as in unloose 1362, unpick 1377, unrip 1513, unbare 1530, undecipher 1554. Cf. 3. 15. 6.

3. 65. uni- /jum/

is correlative with multi-, bi-, tri- and is the Latin counterpart of Gr mono-. As an English formative, it chiefly coins parasyntthetic adjs as biological terms on NL patterns. Classical Latin had very few parasyntthetic adjs, as unicolor, uniformis, uninanus / unanimus, unoculus (un- before a vowel, but from LL on the un- form passes out of use). For the modern words Pliny paved the way with unicalamus, unicornis, uniiugus, unistirpis. Subsequently these adjs were derived with adjectival endings (-alis, -aris, -inus, -atus), and it is these which NL uses and English imitates (with -ate also in the extended form -ated). From the 15th c. on we have adaptations of Latin adjs, as univocate 1432/50, univocal 1541 (recognizable as loans by their stress on the second syllable), uniform, unison (16th c.), unicornous, unireme (17th c.).

English coinages on the above NL patterns occur from the 18th c. on. But the majority of new formations are from the 19th c. Examples are uniangulate, unicapsular, unicellular, unilocular, uniglobular, unipolar, uninuclear, univalvular / uniangulate, uniarticulate, uniauriculate, uniflagellate, unifiolate, unilabiate / uniauxial, unicameral, unidirectional, unilingual, unisexual, unipersonal, unispiral / unipetalous.

On the native pattern of possessive adjs are formed uninoble, univalved. English has formed a few bahuvrihi sbs (after the L type unimamma ‘amazon’) like univalve ‘a mollusc’ 1661, unicell, unicode, unicycle ‘monocycle’. An early loan of this type is unicorn ME (= uniconis of the Vulgate).

Occasionally uni- is prefixed to preadjunctal sbs, as in unisoi farm 1778, unirhyme stanzas 1859, unidirection current 1888 a.o.

In sbs and preadjunctal sbs the main stress is on the prf while the radical has a full middle stress. In parasyntthetic adjs the main stress is on the radical, the prf receives a middle stress.

3. 66. 1. vice- /vais/

is a prf chiefly with words denoting the holder of an office and implies various shades of ‘delegacy, deputyship’ with respect to the real holder of the title of office. Etymologically, vice is a Latin ablative with meaning ‘in the place, instead’. Parallel to pro- (to which it comes nearest semantically) and ex-, vice- has resulted from syntactical groups of the type vice quaestoris. The first instance of a Latin cpd seems to be vice-quaestor LL ‘proquaestor’. Ecclesiastical Latin formed the term vicedominus, app. the title for one who
represented a dignitary of the Church as his judge. ML are *viceconsul*, *vice-decanus*, *viceprinceps*, *vicerector*, *vicerex*. In OF we find *visdame* 'vicedominus' (13th c.), *vezcountes* 'vicecomes' (12th c.), *visamiral* 1339, *vischancellier* 15th c. which were respectively anglicized as *viscount* 1387, *vischancellor* 15th c. Under Latin influence the prf was in the 16th c. refashioned into *vice*-(the same process took place in French), and *viceadmiral* 1520 is only found with this spelling. On the other hand, *viscount* and *viscountess*, as fixed terms of nobility, kept their form, and their pronunciation shows that they are not analysed as prefix-formations.

3. 66. 2. From the close of the 15th c. on, the prf can be considered an English formative: *vice-collector* is recorded from 1497; from the 16th c. are recorded *vice-consul*, *-dean*, *-master*, *-gerent*, *-agent*, *-roy*, *-regent*, *-lieutenant*, *-president* (and other less common words such as *vice-captain*, *-cardinal*, *-censor*, *-commissary*, *-abbot*, *-apostle*, *-architect*, *-governor*, *-king*, *-queen*, *-god*, *-legate*, *-chamberlain*, *-treasurer*, *-warden*). Today the prf is in use only with words denoting high academic or state titles.

There are derivatives from the preceding cbs and also such cbs with non-personal words as are associated with the idea 'office', as *vice-admiralty*, *-royalty*, *-gerency*, *-principalship*, *-papacy* / *vice-chair*, *-government*, *-throne*. No instances occur before the close of the 16th c.: *vice-papacy* 1574 appears to be the earliest cb recorded. Modern is *vice-county* 'county area with regard to the distribution of species of plants etc.' 1859, the only cb that does not connote the idea 'office'.

Derived adjs do not make their appearance before the 17th c.: *vice-ministerial* 1617, *-apostolical* 1641, *-royal*, *-regal* 1839 a.o. A nonce-word is the derivative vb *vice-reign* 1889.
IV. SUFFIXATION

The term ‘suffix’

4.1.1. A suffix is a derivative final element which is or formerly was productive in forming words. A suffix has semantic value, but it does not occur as an independent speech unit. In a looser way, the term is often applied to final elements of foreign origin which have a merely adaptational character. The chief representative of this group is verbal -ate which serves to adapt real or potential Latin verbs in -are.

Suffixes and endings

4.1.2. It is necessary to point out the similarity and difference between derivative and functional morphemes. Morphologically, two words such as citizens and citizenry are formed after the same principle of ‘root plus affix’. At first sight, the conceptual structure also looks very much alike: the -s of citizens and the -ry of citizenry both express the idea of plurality, collectivity. But the difference involved is one between grammatical function and lexical meaning. The -s of citizens is the inflectional formative of the grammatical category ‘plural’, whereas -ry forms a class of words with the semantic basis ‘group, collectivity of . . .’.

A suffixal derivative is primarily a lexical form. It is a two-morpheme word which behaves like a one-morpheme word in that it is “grammatically equivalent to any simple word in all the constructions where it occurs” (Bloch-Trager, OLA 54). An inflected word is primarily a grammatical form which does not meet the requirements just stated. While in a sentence such as this citizenry feels insulted we could substitute the simple, one-morpheme words crowd, multitude, nation for bi-morphemic citizenry without any change in the behavior of the other members of the sentence, replacement by the two-morpheme word citizens would involve a change of this to these and of feels to feel. The formatives -er, -est as expressing degree of comparison are endings, not suffixes. In a sentence such as Paul is older than Peter we could not substitute any one-morpheme word for bi-morphemic old-er whereas in he is rather oldish the adj old can take the place of old-ish. It will also be interesting to note the different phonetic make-up of comparatives and superlatives as compared with derived adjs. Youngish, longish betray the morpheme boundary before -ish in that the final consonant does not change before the initial vowel of the derivative suffix whereas in younger, longer the consonants are treated as standing in medial position in unit words, just like finger or clangor, [ŋ] being the antevocalic (and antesonantic) allophone of /ŋ/.

4.1.3. Functional morphemes do not belong in a book on word-formation. Jespersen does not make the distinction between derivative and functional
IV. Suffixation

morphemes, but treats accidence together with word-formation in the sixth volume of his Modern English Grammar. It is not, however, always easy to draw the line. Tense, number, or case denoting morphemes are easily recognizable as endings as they do not constitute new words, but forms of words. Inflected words are grammatically conditioned variants of independent morphemes, so to speak. In other cases, the decision is more difficult. The functional character of participial and gerundial -ing is evident. Moreover, we cannot substitute any one-morpheme word for either in all constructions (we are shooting rabbits; shooting rabbits is considered great fun). But in other cases the test fails us, as for agent and actions sbs: in he is a writer; this is a list of his writings the grammatical behavior of writer, writing is the same as that of e.g. author resp. book. But again it is obvious that, when the words are used as mere verbal, not as deverbal sbs (as in the writer of this letter; the writing of this letter), the morphemes are functional rather than derivative. As functional formatives of verbal sbs they have been excluded, but as derivative morphemes of deverbal sbs they form new lexical units and have accordingly been treated. For adverbial -ly the test likewise fails, but the predominantly functional character of the morpheme is manifest. It chiefly serves to turn a secondary, i.e. an adjective (rarely a primary, i.e. a substantive) into a tertiary (subjunct). The difference between quick and quickly is one of function rather than of meaning.

The origin of suffixes

4.1.4. As to the origin of sfs, there are two ways in which a sf may come into existence: 1) the sf was once an independent word but is no longer one; 2) the sf has originated as such, usually as a result of secretion. Case 1) applies to a few native sfs only. The sfs -dom and -hood are independent words still in OE, so the process whereby a second-word becomes a sf can be observed historically. In other Germanic languages a similar development has taken place for the equivalent of E -ship (see Wi 295ff. with further material for suffixes which do not occur in English). An instance of case 2) is the sf -ing which is simply the extended form of sf -ing in words whose stem ended in -i.

Half-way between second-words and sfs are certain second elements which are still felt to be words though they are no longer used in isolation: -monger, -wright and -wise exist only as second parts of cbs. I have treated them as semi-suffixes. The fact that a word is frequently used as the second element of a cb gives us no right to call it a suffix. Thus the following are not sfs: -caster (as in broadcaster, gamecaster, newscaster), -fiend (as in the AE words cigarette-fiend, opium-fiend, absinthe-fiend, cocaine-fiend etc., see McAL4, Spl. I. 370), -craft (as in witchcraft, leechcraft, priestcraft, statecraft, smithcraft, mothercraft), or -proof (as in bomb-, fire-, rain-, sound-, water-, hole-, kiss-, humor- etc. proof) which Jespersen (VI. 25. 28) wrongly terms one.

4.1.5. The contact of English with various foreign languages has led to the adoption of countless foreign words. In the process, many derivative morphemes have also been introduced, suffixes as well as prefixes. As a consequence, we have many hybrid types of composites. We have to distinguish between
two basic groups. A foreign word is combined with a native affix, as in *clearness, un-button*. Just as the introduction of a foreign word is an essentially uncomplicated matter, so is its combination with a native derivative element. As no structural problem is involved in the use of a foreign lexical unit, it can be treated like native words. This is the reason why native prefixes and suffixes were added to French words almost immediately after the words had been introduced. Suffixes such as *-ful, -less, -ness* were early used with French words so we find *faithful, faithless, clearness* and others recorded by 1300. The case is different with foreign affixes added to native words. Here, the assimilation of a structural pattern is involved, not merely the adoption of a lexical unit. Before the foreign affix can be used, a foreign syntagma must have come to be familiar with speakers so that the pattern of analysis may be imitated and the dependent morpheme be used with native words. This is much more complicated. When it does happen, such formations are found much later than those of the first type. This is to be regarded as a general linguistic phenomenon. It explains why combinations of the types *break-age, hind-ance, yeoman-ry* crop up much later (about 1375 at the earliest) and are less numerous. The early assimilation of *-able* is exceptional. Some foreign affixes, as *-ance, -al* (type *arrival*), *-ity* have never become productive with native words.

4. 1. 6. The majority of foreign suffixes owe their existence to the reinterpretation of loans. When a foreign word comes to be analysed as a composite, a syntagma, it may acquire derivative force. The syntagmatic character of a word therefore is a precondition for the development of a derivative morpheme.

From *landscape* (which is Du *landschap*) resulted *scape* which is almost entirely used as the second element of cbs, as in *seascape* 1799 and later *earth-scape, cloud-scape, sand-scape, mountainscape, moonscape, parkscape, skyscape, waterscape, house-scape, roadscape, mindscape*. Bootlegger attracted booklegger ‘one trading in obscene books’, *foodlegger* ‘illicit foodseller’, *meatlegger, tirelegger* (used at a time when things were rationed in U.S.).

The word *hierarchy* attracted *squir(e)archy* 1804, which does not, however, mean that there is a suffix *-archy* (listed as such by Jespersen VI. 25. 52). The attraction is prob. due to the rime only, and other coinages have not been made.

After *multitude* Milton coined *infinite* 1641 which attracted *finite* 1644 and *definite* 1836. *Rectitude* (= LL *rectitudo*) caused the nonce-word *correctitude* (q. Jesp. VI. 24. 98); *adaptitude* 1842 is a blend of *adapt* and *aptitude*. But such coinages do not make for a “suffix” *-tude* (treated Jesp. I. c.; if treated as a sf, its form is *-tude* on a native basis with correct, *adapt*, and it is *-ude* with *infinitude, definite*; but the analysis has not led to other coinages).

In American English there are words like *fruitade, gingerade, limeade, pine-appleade* etc. (see MeAlA, Spl. I. 358), formed with the suffix *-ade*, after *lemonade, orangeade*. They are of established currency now.

Outspoken American slang is the sf *-eroo* with endearing force which has coined such words as *flopperoo, checkeroo, jokeroo, bummeroo, kisseroo*. H. Wentworth (ASp 17, 1942, p. 10—15) supposes that the starting-point is *buckaroo*, a corruption of Spanish *vaquero* ‘cowboy’ (see also ASp 18. 71, 1943).
Another AE sf is -eteria with meaning 'shop, store, establishment'. The starting-point is prob. Mexican Spanish cafetería which passed into American English (first used about 1893, see MeAL4, Spl. I. 350—354). As it was immediately analysable in American English, with the first element interpreted as an allomorph of /kɒf/, it attracted a good number of words (chiefly since 1930). Mencken has about 50 words, such as baketeria, caketeria, candyteria, cleaneteria, luncheteria, drygoodsteria, drugteria, fruteria, shoeteria, chocolateria, furnitureteria. The original implication was 'place where articles are sold on the self-service plan' (so in the recent coinage gas-a-teria, Life International, vol. 5. 48, Dec. 6, 1948). The only common word, however, is cafetería, stressed as indicated. The sf is discussed at length by Mencken with reference to the pretty extensive literature.

4. 1. 7. The process of secretion requires some more comment. The basic principle is that of re-interpretation; but there are several ways in which re-interpretation occurs.

1) A cb may be analysed by the general speaker as having two constituent elements, the basis as an independent morpheme and the sf as a derivative element. This is the case of the preceding types lemonade and landscape. This process of direct re-interpretation is the form secretion commonly assumes.

2) A cb is not made up of two constituent elements as far as the general speaker is concerned. If aristocracy, democracy, plutocracy yield more or less jocular words such as landocracy, mobocracy, cottocracy, this is due to a meeting and blending of two heterogeneous structural systems: a certain structural element of one linguistic system is isolated and introduced into another linguistic system. The speaker with a knowledge of Greek isolates -ocracy 'rule' in a series of Greek-coined words and introduces it as a derivative element into the structural system of English. But dependent structural elements are tied up with certain morphologic conditions of the linguistic system to which they belong and cannot therefore be naturally transplanted, unlike words which are independent lexical elements, not subject to any specific morphologic conditions. Such coinages are felt to be hybrids by the word-coiner himself, so the process is not used for serious purposes as a rule. Admittance of such foreign derivative elements is also impeded by the fact that they bear no resemblance to any morpheme with which the hearer of the hybrid cb is familiar. The linguistic situation is different with foreign-coined words of which one element is immediately associated with a morpheme of the hearer's language. Words like barometer, thermometer are automatically connected with the independent word meter whose unstressed allomorph the words contain. This explains the rise and currency of speedometer, creamometer, and quite recent drunkometer (1939, see ASp 24. 74 (1949)). But otherwise, hybrid coinages of this derivative pattern will always have a limited range of currency or the tinge of facetiousness, as bumpology, bumposopher (both jocular from bump 'protuberance on the cranium as the sign of special mental faculties'), storiology, weatherology, dololatry a.o. Parallel to the above words in -ocracy are such in -ocrat, as mobocrat, bankocrat, shopocrat.
Very similar to the case of barometer/speedometer is that of the American sfs -fest\(^1\). From the German words Sängerfest and Turnfest, which were first used in the early 50's in U.S., a series of other words were derived, such as smokefest, walkfest, eatfest, stuntfest, bookfest, gabfest. The element -fest was obviously interpreted as the 'allomorph' of feast. The word cavalcade was re-interpreted as containing the element caival- 'horse' and the sf -cade 'parade' and attracted such coinings as aerocade, aquacade (on a Latin basis of coining), autocade, camalecide, motorcade (on a native basis of coining), recent words which may not stand the test of time. From the word panorama the characteristic ending -rama was secreted with the meaning 'pageant, show' and has recently led to such words as cinerama, motorama, autorama\(^2\).

Sometimes ignorant but pretentious people take to coinings words, re-interpreting foreign words in their own way. They vaguely feel that there is some characteristic termination in a Greek or Latin word which they then attach to some English basis to give the cb a 'learned' tinge. As a result, we get barbarisms in -athon, coined after Marathon, such as danceathon, swimathon etc., in -torium, such as corsetorium, lubritorium etc.\(^3\)

Thus, the rise of sfs illustrated by types aristocracy/landocracy, barometer/ speedometer and others treated in the preceding passage can stay out of account for suffixal derivation.

4.1.8. There is yet a third way in which sfs may arise. Words of apparently only one constituent element may develop derivative morphemes. If we take such a word as hamburger, we observe that it has attracted other coinings like cheeseburger, beefburger, fishburger. The analysis of the word cannot be, as one may feel tempted to assume, that of ham and burger as there is no ham in the hamburger. So the word cheeseburger has not arisen from re-interpretation. What has taken place is a shortening of the morpheme hamburger into a fore-clipped -burger, this part being taken as representative of the semantic elements contained in hamburger\(^4\). The cb cheeseburger therefore is a clipped word for non-existent cheese hamburger. Parallel to -burger words are such in -furter, as shrimpfurter, krautfurter, chickenfurter (see ASp 25 (1950) 315 and 27 (1952) 153—154). In election campaign words such as Hoovcracrat, Willkiecrat, -crat was short for democrat. The word telegram 1852 gave rise to cablegram, radiogram, pidgeogram, lettergram where -gram is short for telegram. The diminutive sf -ling originated in the same way. Wolfling 'young wolf' is a blend of wolf and young-ling 'young animal'.

Nominal and verbal suffixes

4.1.9. In PE there are nominal and verbal sfs. The sfs -fold, -most, and -ward form words which are used both as adjs and adverbs. From the formal point of view, the only group that needs an explanation are the verbal sfs. We

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\(^1\) (See L. Pound, Domestication of the suffix -fest. Dialect Notes vol. IV part V. 1916).


\(^3\) The -thon suffix, by Eugene Nolte. ASp 29 (1954) 229 for -torium see Me AL\(^4\), 179, also ASp 27 (1952) 72—73.


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remember that there was no formation of compound vbs with a noun (sb or adj) for a first-word in OE. As we take compounding to be the historical stage preceding suffixing, we shall not be surprised to see that there are no old verbal sfs either. The old form of derivation in such cases was that of derivation without a derivative morpheme (see 5. 1ff.). PE -ate, -ify, and -ize are due to foreign influences. On the other hand, we have two sfs (-er and -le) deriving from verbal bases which form iterative and frequentative vbs. For -en see 4.2.8.

4.1.10. The meaning of a suffix is conditioned by the particular semantic character of the basis to which the sf is attached, also by the linguistic circumstances in which the coinage is made. In general parlance, a fiver is a bill of five (dollars or pounds), in cricket jargon it is a hit for five, in school life it may denote a boy who always scrabges through with a five. A greening is a green variety of apple or pear, but a whiting is a white variety of fish. For other possibilities see -er and -ing, for instance. Some concepts are apt to be represented by sfs in many languages, as those of condition (state, quality etc.), appurtenance, collectivity, endearment, agent a.o., but theoretically there is no telling what concept may not develop to find expression in a sf. French has a sf -ier (type pommier) to denote fruit trees, there is L -ile for the idea of 'stable for domestic animals', OGr had a sf -itis (type nephritis) meaning 'disease'. These have no parallels in English, or in German either. But no intrinsic linguistic principle is involved in the absence of such morphemes. The rise of new sfs in English (4.1.6ff.) goes to corroborate this.

A few words are needed with regard to deverbal derivatives. A deverbal derivative is not fundamentally different from a cpd whose first member is a verb stem, so, as in the case of denominal sfs, a great number of meanings are possible (cp. 4.30.10 for instance). In practice, however, the possibilities are much restricted. Deverbal sfs express grammatical functions rather than semantic concepts, and the usual implications are 'act, fact, instance of . . .' (arrival, guidance, warning), sometimes 'state of . . .' (starvation, bewilderment), 'agent' (personal or impersonal: baker, eraser, disinfectant), 'personal object' (direct or indirect, only with -ee: transferee, draftee), 'object of result' (breakage, savings), 'place' (settlement, brewery, lodgings). Similar considerations apply to derivation by a zero morpheme (pickpocket, blackout, look). See also index of principal sense groups of morphemes.

The two morphological bases of derivation

4.1.11. To give a preliminary survey of the several methods of suffixing in English we may distinguish six ways: 1) Derivation by native sfs, as goodness f. good. This process involves no changes of stress, vowels or consonants in the derivative as against the basis. 2) Derivation by means of imported sfs under the same phonologic conditions as group 1), as lovable f. love. 3) Derivation by means of imported sfs, involving phonologic changes of stress, vowels or consonants, as Japâse f. Japán, historicity from histâric. The three preceding groups will be referred to as word-formation on a native basis of coining (wfnb). 4) The sf is tacked on not to an English word but on to a Latin stem which closely resembles, however, the word that stands for it in English, as
scient-ist f. science. 5) The sf is tacked on to a Latin or Greek stem which has, however, no adapted English equivalent, as lingual from L lingua, chronic f. Gr chronos. Groups 4) and 5) will be referred to as word-formation on a foreign or Neo-Latin basis of coining (wffb). 6) Words which have originally been borrowed separately come to take on the form of derivative alternations in English on whose pattern new words may be derived: on the analogy of piracy as from pirate, candidacy can be formed from candidate. This method will be referred to as correlative derivation.

4.1.12. The difference made here between the two methods of wfnb and wffb does not correspond to the traditional distinction between derivation by means of native and foreign sfs. For native sfs, as pointed out, the derivative basis is always native. But with sfs of foreign origin the basis of coining may be either native or foreign or both. The sf -al derives postal, seasonal f. E post, season, and lingual f. L stem lingua, horizontal f. Gr stem horizont-; -ify forms dandify, monkeyfy as well as aurify, carnify, -ism derives both words such as Englishism, Irishism and Anglicism, Briticism. This may suffice to indicate what the reader will find more in extenso under the respective sfs.

Suffixing on a Neo-Latin basis of coining

4.1.13. The question of wffb which I have touched upon in a general way will need a few remarks with special regard to suffixing. As far as is necessary for the restricted treatment of wffb in this book I will give a short summary of the laws of NL derivation, regarding as Latin also Greek words which have been fitted into the Latin structural system. As English has only sfs beginning with a vowel as far as Latin is concerned, we need only discuss these.

L words in -a drop the final vowel before the vowel of the sf: Rom-anus, agu-osus, Thom-ista. This explains E architectur-al, lingu-al, propagand-ize, Spinoz-ism etc., derivatives from actual or possible L words in -a.

L words of the -o declension drop the genitive ending: equ-inus, ole-arius, offici-osus, miracul-osus, Scôt-ista. Cps E ocul-ist, balne-al, cloist-r-al (L claustrum, in LL pron. clostrum, yields OF cloistre under the influence of cloison), asbest-ine (L asbestus) etc.

L words of the -u declension retain the u: actu-alis, spiritu-alis. English exs are casu-ist, contractu-al (though it is at the same time analysed as English-coined contract-ual).

L words of the third declension drop the genitive ending: mar-inus, su-inus, iur-ista, Aristotel-ista. To this group belong E carn-ify, multitudin-ous, carbon-ize, dramat-ize. L stems in -at- simplify the stem into -t-: tempest-inus, calamit-osus. This accounts for E derivatives from -ty words with an elided vowel: alacrit-ous, societ-al, facilit-ate, libertarian, annuit-ant.

When the stem ends in the same vowel as the sf begins with, the vowel appears only once: Lat-inus (f. Lati-un), evangel-ista, anatom-ista (f. anatomi-a). Correspondingly we have in English Americ-an, Kore-an, scient-ist, alchem-ize, allergy-ic, even alcal-ine (f. alkali). As NL words in -ta, -ium are anglicized as -y words, we get the alternations -y/-ic, -y/-ize, -y/-ist, -y/-ism (alchemy/ alchemize, allergy/allergic etc.).

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IV. Suffixation

Derivatives from adjs are similarly formed: E historic-ity, feminine-ity (L femineus), technical-ity, spectacular-ity.

With deverbal derivatives the stem is usually that of the second ptc: pass-ivus, absolut-orius, struct-ura. Cp. E product-ive, admiss-ive etc. (see 4.5). Less frequent is derivation from the present stem: cad-ivus, with elision of the final vowel noc-ivus, opt-ivus, a type imitated in English by cresc-ive, quer-ist (but cp. 4. 5. 2).

Learned words are chiefly coined on a Neo-Latin basis. Cp. for instance the numerous words in -ist, as scholarly or scientific terms all latinizingly derived (e.g. scientist, psychiatrist, formed after L jurista, baptista). Words used in science, such as argentic, aurous, bromine, buccal, are all derived on a Neo-Latin basis. The sf -aster is English in the same sense: it forms words on a Latin basis as musicaster, poecaster, theologaster, criticaster, but never any such words as *uritaster, *paintaster. Words in -ity, as catholicity, historicity fr. catholic, historic show by their pronunciation that they are not simply derived from the corresponding adjs (historically speaking). Latin-coined are adjs in -atory, as informatory, observatory, investigatory, though many can be analysed as native-coined. The sf -trix is termed 'a learned feminine suffix' by Jespersen (VI. 15. 94). This does not really explain matters. We observe that -trix is only found in genuine Latin words, being the feminine counterpart of masculine sbs in -tor. Such words are chiefly found in legal terminology, as administratrix, executrix, mediatrix, testatrix. In Geometry, words in -trix denote straight lines.

4.1.14. What I have pointed out shows the influence Latin has exercised on the coining of English words. The great share Latin has in the English vocabulary has always been recognized. But this is a matter of linguistic sociology rather, whereas wffb concerns the physiological structure of the vocabulary. The forms of linguistic thought themselves are for a great part Latin. Similar observations could be made about other European languages (French, German) and about international scientific terminology in general (so far as it is not altogether Latin in form).

4.1.15. There are many words, esp. in scientific terminology, which are used in their Latin form. Many words have been coined on English soil which, as technical terms, form part of the English vocabulary. But as most of them have not been actualized, they do not interest us in wff. Their treatment belongs to the external history of the language. Such words sometimes acquire a semi-general currency, as AE oceanarium 'underwater zoo', vocarium 'collection of gramophone records of the human voice', abortarium 'hospital specializing in abortions', ritualarium 'Jewish ritual bath' (q. MeAL4, Spl. I. 355), coined after Latin place-denoting words like aquarium, terrarium, planetarium etc.

4.1.16. Suffixing on a foreign morphological basis offers an aspect similar to that observed with prefixes. There are 1) terminal elements which are suffixes in Greek or Latin, as (in anglicized form) -ic, -ism / -an, -ine; 2) such final elements as are really second-words of Latin resp. Neo-Latin compounds, as (in anglicized form) -scope, -tomy / -parous, -facent. 3) There is a third group of scientific sfs which were artificially coined, but have the appearance
of Latin or Greek sfs: -ad, -one, -ol, -yl. In wfnb we have termed sfs such
terminal elements as can be tacked to an English word. In wffb, however,
the decision is not so easy. The word scientist is generally considered a suffixal
derivative as -ist is universally held to be a sf. A word such as galvanoscope,
however, is either not analysed at all or said to be galvano- plus -scope (OED).
But what is -scope? The OED terms elements like galvano- ‘combining forms’
and elements such as -scope ‘terminal elements’. This terminology only begs
the question as to what these elements really are in wf. In this book I have
called ‘prefixes’ such derivative elements as can be prefixed to full words
without, however, being independent words themselves in English. Consequent-
ly we might term ‘suffixes’ such terminal elements as are tacked on to full
words without, however, their having an independent existence as words in
English. Neither scientist nor galvanoscope are analysable as ‘English word plus
affix’. Yet, there is a great structural difference between the two words. The
radical of scientist is immediately connected with the word science of which
it is merely an allomorph, so to speak. The case is different with galvanoscope
and, generally speaking, with obs with ‘terminal elements’. The first-word
cannot be connected with any independent English word as its allomorph. I
have therefore treated words of the type scientist while I have left out obs
with ‘terminal elements’.

Occasionally they develop into sfs attached to an English word (wfnb), as
in bumpology, bumposopher (both jocular from bump ‘protuberance on the
cranium as the sign of special mental faculties’), bancomania, scribbleomania,
queenomaia, leatheroid, hurraygraph, creamometer, speedometer, storiology,
weatherology, dollolatry a.o. But on the whole, these terminal elements coin
words within the lines of wffb.

Wf on a NL basis of coining may enter the group of correlative derivation
(cp. 4.1.17) when both radical and derivative have been introduced into the
language so as to represent a derivative alternation (words in -ic/-icity, -ine/
-inity, -icious/-ocity and many others, part of which have been treated in this
book). I have not, however, dealt with alternations such as horizon/horizontal,
science/scientist which have not the character of derivational types in English.
Alternations which are not type-forming, have no morphophonemic value.
Such cases have been treated under the respective sfs as derivatives on a NL
basis of coining.

**Derivative alternations**

4.1.17. The English vocabulary has been greatly enriched by borrowings,
chiefly from Latin and French. In course of time, many related words which
had come in as separate loans developed a derivational relation to each other,
giving rise to derivative alternations. Such derivative alternations fall into
three main groups.

Group A is represented by the pairs 1) -acy/ 2) -ate (as piracy ~ pirate),
1) -ancy, -ency/ 2) -ant, -ent (as militancy ~ militant, decency ~ decent), 1)
-ization/ 2) -ize (as civilization ~ civilize), 1) -ification/ 2) -ify (as identification ~
identity), 1) -ability/ 2) -able (as respectability ~ respectable), 1) -ility/ 2) -ible
as convertibility ~ convertible), 1) -ician/ 2) -ic(s) (as statistician ~ sta-
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tistics), 1) -icity/ 2) -ic (as catholicity ~ catholic), 1) -inity/ 2) -ine (salinity ~ saline).

If 1) is a derivation from an English word, the only possible word is 2), i.e. if piracy is a derivative from an English word, only pirate is possible. The statement does not imply that for every 1) there must be a 2). 1) may be a loan, or it may be formed on a Latin basis without any regard to the existence of an English word at all (enormity, for instance, is so coined). Nor does the derivational principle involve the existence of a 1) for every 2) (many words in -able or -ine are not matched by words in -ability resp. -inity).

Group B is represented by the pairs 1) -ation/ 2) -ate (as creation ~ create), 1) -(e)ry/ 2) -er (as carpentry ~ carpenter), 1) -ress/ 2) -er (as murderess ~ murderer), 1) -ious/ 2) -ion (as ambitious ~ ambition, 1) -acious/ 2) -ation (as vexatious ~ vexation).

If 1) is a derivative from another English word, the derivational pattern 1) from 2) is possible, but not necessary. A derivative in -ation such as reforestation is connected with reforest, a derivative such as swannery is connected with swan, archeress is connected with archer, robustious is extended from robust (but otherwise an adj in -ious derived from a sb points to the sb ending in -ion, i.e. we have really type A).

Group C is nothing but a variant of A and concerns adjs in -ious, as flirtatious. Originally deriving from sbs in -ation, the type is now equally connected with the unextended radical, i.e. flirt (the older derivation ostentatious 1658 has not entered this latter derivational connection).

4. 1. 18. Learned words or scientific terms which are NL or their anglicized adaptations come to enter into morphologic relations with their derivatives on a Greek resp. Latin basis of coining. The majority of coinages are formed after the principle of correlative derivation, but sometimes the adaptation of loans has led to patterns of coinage on a native basis, as type problem/ problematic, globe/globous, herb/herbaceous. Alternations have been treated under the respective sfs. As I have not dealt with sfs which have not led to coinages on a native basis, I will mention here such as would otherwise have had to be omitted. The types corpuscle/corporeal and carbuncle/carbuncular [s]/[k]j³lər] resp. [k]/j³lər] (concern adapted L words in -culum deriving adjs in -cular resp. words in -usculum deriving adjs in -uscular). Exs are crepuscle/ crepuscular, muscle/muscular // appendicle/appendicular, auricle/auricular, fascicle/fascicular, follicle/follicular, furuncle/furuncular etc.

Type mania/maniac [nei/ə/nik].

The type is important on account of the many sfs with -mania as a second element. The sf -ac resp. -iac, as in prosodiac, elegiac, demoniac, Egyptiac (marked "obsolete" in OED, but commonly used by Toynbee), forms words on a L basis (all the foregoing words are anglicized Latin -iacus words). The termination has proved productive in English thanks to maniac (L maniacus which seems to be a Latin extension as the Greek pattern is not recorded) and the numerous sfs of which it forms the second element. Exs are angulomania/angulomanic, bancomania/ bancomanics, bibliomania/bibliomaniac, egomania/egomaniac, kleptomania/kleptomaniac, megalomania/megalomaniac, scribbleomania/scribbleomaniac etc. The same alternation we have in hypochondria/hypochondriac, paranoia/paranoiac.
Suffixed derivation and stress

4.1.19. This question has been much neglected. The accentuation of long English words of non-native origin is usually treated with little regard to the derivative patterns, which makes a few words here all the more desirable. We are, however, only concerned with the principal stress, leaving aside the question of secondary stress. Various trends and tendencies can be observed as acting and counteracting forces in the English stress system.

The most important factor is the tendency toward homological stress. All native sfs and the great majority of foreign sfs are attached without causing the main stress of the radical to change its place (good/goodness, father/fatherhood // love/lovable, fulfill/fulfillment).

With words of foreign origin or English coinages formed by means of foreign sfs which do not enter the foregoing group we find either preservation of the foreign stress pattern (in words borrowed or coined in the MoE period) or a correlative stress pattern (see 4.1.17).


This book has no direct bearing on our subject as the standpoint of the author is not morphological. D. is not primarily interested in the derivative role of stress though he recognizes the stress of underlying English bases (= “derivative accentuation” p. 37ff.) as an important factor causing deviation from the principal stress patterns. The chief cases relevant to our subject are words in -able (pp. 55—86) and -ize (pp. 192—216) whose stress patterns bear out what we have termed the homological stress tendency in English. D. is sometimes disinclined to assume derivative stress. The words analogical, arithmetical, economical, harmonical, hemistichal, nonsensical, philological, physiological, simonical were formerly stressed on the same syllables as their bases, but D. holds that these stressings “are probably due to misprints” (p. 188). Why? The stress may have been derivative, but then a latinizing tendency set in: the stressing analogical arose from the Latin analogicus (with -al replacing -us) or as an extention of E analogic, the stress in the latter being again due to the stress in the Latin analogicus with the Latin ending dropped (the stress pattern -ic had come to prevail as early as the 16th c., see Danielsson p. 186).

It does not seem to me to matter very much whether a derivative has four, five, or six syllables so long as a word is derivationally connected with a certain basis. If D., who has set up his types according to the number of syllables of the words, establishes (p. 57) a type of pemptotone accentuation for authorizable, ilquefiable, one of hectotone accentuation for alkalisfiable, mineralizable etc., we would, from our point of view, simply state that derivation in -able does not cause shift of stress with regard to the basis. If we learn that hectotone accentuation “has never been very frequent” (p. 57), we should rather say that, anyway, derivatives of six syllables from tetrasyllabic bases are not numerous. But no stress principle can be involved in D.’s statement. If e.g. systematize had derived an adj in -able (it does not seem to exist), it could only be stressed on the same syllable as the basis.

Homological stress is a greater force in PE—and Danielsson’s extremely valuable book shows that the tendency is several centuries old—than one might think.
4.1.20. The following sfs involve stress shifting as against the stress pattern of the unsuffixed basis. The main stress of the radical becomes a secondary stress in the derivative (the dash indicates the syllable preceding the sf): -al (only in certain cases, see 4.6.2), -arian, -ary (only in certain cases, see 4.13), -ation, -cé, -één (both type jackeen and velveteen), -ér, -ée, -ésque, -étte, -al, -ian, -ious, -idna, -ic, -ician, -ity, partly -ual.

4.1.21. If a foreign-coined word has not been actualized (i.e. is not analysable as composed of two English morphemes, word resp. stem plus sf), it seeks connection with another English word to which it stands in a kind of quasi-derivational relation (as systematize after system, decisive after decide, significative after significant). We can no more than point out this tendency, the study of which would throw interesting side lights on wf. It would show how far words which derivationally speaking have no relation to each other, are felt to be connected.

4.1.22. Loans or foreign-coined words show a tendency to stress the antepenultimate. Cases of loan words and their stress are not relevant to wf, but the tendency has its place here insofar as many sfs form words on a Latin basis of coining (-ity, -ial, -ian, -ual) or have become productive on a native basis in the MoE period only when the older antepenultimate stress tendency had long taken root (-ical, -ial, -ual, -ian, -dian, -drious, -orial, -drious; -ic owes its stress pattern either to L -icus or older E -ical). The tendency also applies to cases in which a sf has a merely adapting function in anglicizing non-actualized loans (verbal -ate, -ferous, -ferous etc., see 4.71.10ff.; -ologist, -osophist, -osophist, -ography, -ology, -osphy, -atry, -ocracy and other -y (Gr -ia) words). Historically it accounts for the stress in -ician, -ation which were trisyllable originally.

4.1.23. In loans or foreign-coined words of three or more syllables, the antepenultimate tendency is counteracted if the last two syllables are closed syllables or if the last is closed and the last but one has a long vowel or diphthong. In this case the next to last is stressed. Relevant to wf are certain cases of sf -al (instrumental as against instrument, see 4.6.20). But it may be observed that homological stress is perhaps slowly progressing with regard to words containing a long vowel or diphthong in the last but one. Suicidal, germicidal, homicidal are more frequently heard than suicidal, germicidal, homicidal (the only stressing the OED gives).

4.1.24. With sfs which acquired derivative force in the MoE period the stress pattern of the language from which the first words were taken, has not been changed, which accounts for the retention of stress on the sfs -és (Italian), -ésque, -éér, -étte, -één (French resp. for type girlen, Irish), -idna (Latin). That -éé words which are very old in the language have the stress on the sf is probably due to their character as words of a particular group (legal terms). The retention of the foreign stress pattern is the same as that in recent loans from French in -age (massage etc.), -ade (barriade etc.) and from Latin -ose (bellicose etc.). For other such words see Jesp. 1.5.8.

4.1.25. The sfs of foreign origin which involve no stress shifting are those which had derivative force already in the ME period. An exception is -ual
for which derivative pairs existed before 1400. Homological stress has not, however, developed (with the exception of spirit/spiritual), probably on account of the small number of derivatives (see 4. 6. 18), possibly also under the influence of ial words. Other sfs have become productive on a native basis of coining too late for a homological stress pattern to be able to uproot the much older rhythmic stress pattern that had developed with loan words (ical, ity, ic; see also above 4. 1. 28). The -ician also has preserved the ME stress pattern with the original French secondary stress on the first changed into the principal stress. The trisyllabic form, common till the 16th c. (see Jesp. I. 9. 87), is probably one of the reasons. Otherwise the derivative alternation magic/magician existed as early as the 14th c. (see 4. 44. 1).

4. 1. 26. With the stressing of words in -ation, -arian, -arious, -orial, -rious the Latin has probably played a part. The speaker was certainly conscious of the Latin words in -atio, -arius, -arius for which the English words stood. It is otherwise difficult to understand why no homological stress pattern should have developed between purify/purification, canonize/canonization though the derivative alternations are as old as the 14th c.

Phonological changes of vowel or consonant in derivation

4. 1. 27. Derivation by means of foreign sfs, esp. those which derive on a NL basis, often involve phonological changes of vowel or consonant. Vowel and consonant changes most often go with stress shift. In several cases, however, we have vocalic and consonantal alternations but no shifted stress. Exs of the latter are: sincere/sincerity [ir/eriti], austere/austerity, severe/severity, extreme/extremity; bronchitis/bronchitic [ atas/ituk], otitis/otic, peritonitis/peritonitic; tenacious/tenacity [eses/wesiti], capacious/capacity, predacious/predacity; ferocious/ferocity [osos/ositi], atrocious/atrocify.

Vowel and consonant changes are accompanied by stress shift in the following cases:

Type artifice/artificial, avarice/avaricious [is/išol] resp. [is/išes].

If a word in -ice, pron. [is] (or occ. [aui]) derives by means of a sf beginning with [i] (chiefly -ial, -iary, -ious), we have the alternation [is (ais) /išol, išeri, išes]. Exs are benefice/beneficial, beneficiary, auspice/auspicial, auspicious, prejudice/prejudicial, office/official, officious, with [ai] in the radical sacrifice/sacrificial, vice/vicious.

Type mechanic/mechanician. This correlative type implies the phonological alternation [ik/išen]. For exs see 4. 44.

Type historic/historicism/historicity. If a word in -ic forms derivatives in -ism -ist, ise- (without stress shift), -ity (with shifted stress), the alternations [ik/iszm, isst, isstn-] are involved. Exs are attic/atticism, atticist, atticize, historic/historicism, historicist, historicity, aesthetic/aestheticism. The change occurs also with derivatives from -ac: Syriacize (Toynbee) f. Syriac. Catholic, catholicism, catholicity shows an isolated stress pattern. The preceding phonological alternations have derivative value.

4. 1. 28. As for the other vowel changes involved, the following tendencies are observed. The full stressed vowel of the initial syllable in the radical is
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retained when it receives a middle stress in the derivative. Exs are: pútrìarch/ pútrìarchal, polìtics/polìtician, édòtor/édòtèrial, sècretary/sècretèrial, mònager/ mònagèrial, instrùment/instrùmental, àldèman/àldèmanèic, àuthorìze/àuthorìzi-

The stressed vowel of the radical stands in the syllable immediately preceding the full stress in the derivative i.e. has weak stress. A distinction has to be made between vowels in closed and in open syllables.

Short full vowels in open syllables change the vowel to [ə]: hábit/hàbítual, vàlid/ vàlidity, ócid/ócidètity, plàcid/plàcidètity, sb ãffix/vb ãffìx, sb prùduce/vb prùduce; [i] is retained: lèvìd/lèvìdètity; [ə] is changed to [i]: sb rèbèl/vb rèbèl, sb rècord/vb rècord, sb prèsent/vb prèsent, édèt/édètìon, tèpìd/tèpìdètity, trepìd/trèpìdètity.

Short vowels in closed syllables tend to be retained, with the exception of [o]: adj ábsent/vb absènt, tàtics/tàcticèn, sb ãccènt/vb ãccènt // sb exçèpt/vb exçèpt, sb expùrt/vb expùrt, sb escort/vb escort // public/publicìty, rùstìc/rùstìcìty (but sb subject [ə] against vb subject [ə]; perh. because only prf sb has the full vowel!) // [o] is changed to [ə]: complex/complexìty, sb confìne/vb confìne, sb convìct/vb convìct.

Some long vowels are retained in quality and quantity; others are shortened, though no fixed rule seems possible: [ə] tends to be retained: sb aùgment/vb aùgment, sb tòrmént/vb tòrmént, causàl/causeìty // [i] tends to be shortened: équàl/equàlìty, légàl/légàlìty, adj frèquent/vb frèquent, sb règress/vb règress // [ə] tends to be retained: ártìst/ártìstìc, bárbarous/bárbarìty, sàrcasm/sàrcàstìc // [ə] is regularly shortened: sb pèrmìt/vb pèrmìt, sb pèrfùme/vb pèrfùme, sb fèrmént/vb fèrmént // [u] tends to be retained: brùtal/brùtalìty, nèutral/nèutralìty, rheùmatic/rheùmaticìty.

Diphthongs vary: [o] is retained with a glide by some speakers, reduced by others in tìnal/tìnàlìty, tòtal/tòtalìty, vòcal/vòcalìty, but the alternation [o/ə] has morphological value in sb pògress/vb pògràss, sb pòtèst/vb pòtèst. [ai] is always retained in fìnàl/fìnàlìty, but in other cases it may also alternate with [i], as in mèior/mèiòrìty, cìte/cìtatìon // [e] tends to be reduced to [ə]: ágent/àgentìal, fàtal/fàtalìty, sàline/sàlinìty, màjòr/màjòrìty.

4. 1. 29. The full stressed, non-initial vowel of the radical comes to stand in weak stressed syllable before the main stress of the derivative. Short vowels in an open syllable are reduced to [ə]: Japàn/Japànèse, mecènìc/mecènìcìan, mathèmàtics/mathèmàtìcìan // historìc/històricìty, atòmìc/atòmicìty.

Short vowels are retained when standing in closed syllable: électric/électricìty, eccèntric/eccèntrìcity, augment/augmentàtion, dialèctìc/dialèctìcìan // elàstìc/elàstìcìty, retràct/retràctàtion.

Long vowels tend to be shortened: trànsfèr/trànsfèrèè, rèfèr/rèférrèè // rèstòré/rèstòréàtion, adòrè/adoràtion // rètòrd/rètòrdàtion // extrànal/extrànalìty. But cp. adovntage with [ə] and adovntágeois with [ə].

Diphthongs are reduced: [ai] alternates with [i], as in respìre/respiràtion, adìmèrè/adìmèràtion.

If a full stressed vowel of the radical receives middle stress in the derivative, it is not changed: rèstòrable/rèstòrabìlìty // suòpun/suòpùrìty // extràminàte/extràminàtìon // compàtìble/compàtìbìlìty, inflàmmàble/inflàmmàbìlìty, spec-tàcular/spec-tàculàrìty.
4.1.30. If the middle or weak stressed vowel of one of the syllables after the main stress takes the main stress in the derivative, it is raised in volume. In most of all cases this concerns [ə] which may be raised to various vowels, the choice of which is often (esp. with proper names) merely dictated by the spelling: superior/superiörity [o/ɑ], similar/similărity, mental/mentáltity [o/ə], ceremony/cerêmóinl, ceremony/ceremónious, Milton/Miltónian [o/ə], censor/censorious, senator/senatóriəl [o/ə], Milton/Miltónic [o/ə], agent/agéntial, element/elementált, elementary [o/ə], secretary/secreétáril [o/ə], [s/ə] [s/ə], minister/ministéril, manager/managérial, Spenser/Spenserian [ə/ɪr], Galsworthy/Galsworthian [o/ə], ammoniac/ammoniаcal [ə/ə], Shaw/Shavian [o/ə], Marlowe/Marlovian [o/əv]. The pair anthracite/anthracitic aɪ/tɪk represents the regular derivative alternation while no diphthong is changed in pairs of the type alkaloid/alkaloidal.

4.1.31. Vowels which are weakly stressed in the radical as well as in the derivative are retained: mathématics/mathématician, mánager/managérial, supérieur/superiörity, lócáté/locatégion BE.

If, however, the vowel [ə] in an initial syllable (where it is always weakly stressed) receives middle stress in the derivative, it is raised to a fuller vowel: atomic/átomicity, advantage/advantageus, statistics/státicsian, Japán/Jápánése have the alternation [o/ə]. Short [ɪ] is sometimes lowered to [ɛ], as in respire/rèspiration, restore/rèstoration, mechanics/mèchanician, refer/rèfereee, sometimes raised to [i], as in retard/rètardation, retentive/rètentitivity, retract/rètraction.

On the other hand, a diphthong which has middle stress in the radical may be reduced in the derivative if the syllable in which it stands is only weakly stressed. Alternation of [ai/ə] occurs beside that of [ai/ə] in pairs of the type civilizé/civilization. Cf. also the type edifíy(edification).

**Word-formation on a native basis of coining**

4.1.32. All native suffixes and many suffixes of foreign origin are tacked on to the English word without any phonologic changes modifying the derivative as against the basis. In present-day English, the final sounds of the basis are not changed, regardless whether the suffix begins with a vowel or a consonant. Hiatus is not avoided, as is illustrated by such derivatives as suable, drayage, withdrawal, Garboesque, boyish, truism, cityite, showy.

With speakers who do not pronounce final [r, ɹ] after a long stressed vowel (beer, bear, bar, boar, burr, boor) or after an unstressed [ə] ([ə] cannot occur in a stressed position), as in author, water, [r] nevertheless appears in the derivative when the suffix begins with a vowel: beery, bearish, boarish, burry, boorish, authoress, watery.

Derivation from disyllabic words ending in [l] shows two patterns when the suffix begins with a vowel. 1) final syllabic [l] loses its syllabic character in the derivative, as in angle/angler, haggle/haggler, nibble/nibbling, sample/sampler, shuffle/shuffler, peddle/peddler, tattle/tattler, tickle/ticklish, sizzle/sizzling, bustle/busting. 2) syllabic [l] remains syllabic in the derivative. The type applies when [l] is preceded by [r], [n], [v], [tʃ], [dʒ], or a vowel, as in quarrel/quarreling, travel/traveler, funnel/funneling, hatchel/hatcheling, cudgel/cudgelng, jewel/jeweler.
Latin-coined words in -al fall into this latter group, not dropping the vowel in the derivative. To put it more correctly, such words do not end in a syllabic [l] but in biphonemic [sl]. Cp. nibble/nibbler and herbal/herbalist, haggle/haggler and legal/legalist. In suffixal derivation involving stress this vowel alternates with [æ]. In part it is probably the spelling that is responsible for the alternations. Spelling appears to account for other alternations, too. Cp. peddle/pedler, pedlar and pedal/pedaler, pedaling; gamble/gambling and gambol/gamboling. Unless we invoke the same principle of explanation, it will be difficult to tell why different types of alternation hold for drizzle/drizzling and chiseling. It might not even be wrong to assume that the whole group deviating from pattern 1) owes its type of alternation to spelling.

4.1.33. We have another instance of change at the end of the root in Latin-coined damnation, damnable, condemnation, condemnable as against damn, condemn where the final n of the cluster mn has been dropped in accordance with the rules of phonetic development. But the native sfs -er, -ing derive on the homologic pattern just described: condemn [kændəm(r)], condemning [dəmɪŋ].

With the sfs -ure and -ier we have consonantal alternation between [s] and [z], [z] and [z] (see 4.30.18 and 4.77.5). Other changes in the radical are found with sfs which have for centuries ceased to be productive, as -ier (coal/collar), -ern (south/southern). They are derivationally not relevant to the structure of PE.

In OE the sfs -en (gold/gylde, see 4.27.2), -ish (Welsh, OE Welisc f. Walh, see 4.50.1) involved vowel mutation. By the ME period the vowels of the derivatives had all become homologically refashioned after the radicals. Ablaut as a derivative principle with the so-called gradation nouns (rād/ridan, bora/beran) was already dead in OE.

4.1.34. Derivation does not involve phonological changes of voice in PE as it did in former stages of the language. Up to EMoE phonological opposition of voiceless and voiced fricative was a derivative element, relevant to the distinction between nouns and verbs. This was originally a merely mechanical development: OE and ME final fricatives were voiceless versus voiced fricatives in medial position. The first case occurred with uninflected noun forms (hūs, lūs, wif, cnif etc.), the second with inflected noun forms (this case is relevant to accidence, not to word-formation) and denominal derivatives, i.e. verbs or nominal derivatives containing a suffix.

The older stage of relevant phonological opposition is illustrated by advice 1297 (= OF avis) / advise 1297 (= OF avisier), close 1325 / close 1205, device 1290 (OF devis) / devise 1300 (OF devisier), diffuse 1526, obviously the unvoiced vb / diffuse 1400, excuse 1374, voiced in French, unvoiced in contrast to the vb / excuse 1225, grease 1290 / grease 1380, voiced in contrast to the sb from which it is derived, house OE / house OE, house OE / house 1440, voiced in contrast to the sb from which it is derived, mouse OE / mouse 1250, voiced in contrast, use 1225 (OF us) / use 1240 (OF user).

Belief, OE bilēafe becomes believe, unvoiced in 16th c. in contrast to the vb / believe 1200, f. OE biēfan, calf OE / calve OE, grief 1225 (OF grief) / grieve 1225

1 For the historical aspect of the question see O. Jespersen, Linguistica, Copenhagen 1933, 346ff. (Voice and voiceless fricatives in English).
(OF grever), half OE / halve 1300, proof 1225 (prob. the unvoiced derivative from the vb) / prove 1175 (OF prover), safe 1297 (OF sauf) / save 1250 (OF sawer), sheaf OE / sheave 1579, shelf 'bookshelf' 1386 / shelf 1598, strife 1225 (OF estrif) / strive 1225 (OF estriver), thief OE / thieve OE, wife OE / wive OE, wolf OE / wolve 1702, is prob. older as wolver is rec. 1593.

mouth OE / mouth 1300, teeth OE (pl. têþ) / teethe 1410, sheath OE / sheathe 1400.

The following is a list of nominal derivatives having a suffix: leavy 1420, obs. wolvish 1430—1817, thievish 1450 (or f. vb thieve), obs. vivish 1535—1664, elvish 1340, wively, wiveless, liveless, all occas. in EMoE, hooved 1513, leaved 1250, obs. leaveless 1581—1638, wivehood, occas. in EMoE, thievedom, occas. in EMoE / mouthed 13.., mouthy 1589 (or f. the vb), northern OE, worthy 1250 // lousy 1377 (or f. the vb), greasy 1514 (two pronunciations), greaser 1641 (two pron.).

The oppositional type seems to be productive till about 1600, as the foregoing exs show. There is a modern knife 1850, but the usual word is knive.

4.1.35. The PE types are knife vb f. knife sb, wolfish f. wolf. Derivation of this kind must have set in about 1400 if we consider that tooth 1410 has a voiceless fricative (though chiefly occurring in form toothing where the fricative is medial) while teethe, rec. also 1410, has the voiced fricative. Exs of denominal vbs are grass 1460, price 1490 (the deverbal sb rise 1410 has a voiced fricative, which also seems to point out the existence of the new derivational type about 1400) and the deverbal sb close is rec. even somewhat earlier (1399) / deaf 1460, sheaf 1506, scourf 1599, hoof (it) 1641, knife, life, shelf, staff, beef, brief, wolf (all 19th c.) / tooth 1460, unearth 1450, sleuth vb 1905.

Suffixal derivatives are mousy dim. 1693, adj 1812, mousery 1888 / scourfy 1433, leafy 1552, shelfy 1576 'full of sandbanks' / frothy 1533, breathy 1528, earthy 1555, lengthy 1759 // leaved 1552, hoofed 1607 / toothed 13.., sheathed 1664 // wifeless, lifeless (OE), leafless 1590 // wifely (OE) // wolfish 1570, elfish 1542, dwarfish 1573, deafish 1611, selfish 1640, wifish 1773 // lifer 1830 // mouter 'blow on the mouth' 1814 // wife 1841 // selfism 1823 / mouting 'entrance to a mine' 1883 / deafen 1597, strengthen 14th c., lengthen 15201.

4.1.36. The invasion of French, Latin, and Greek words did not oust the native suffixes as it did the prefixes. It has exercised a restricting, modifying influence only. The suffixes -ly, -some, -dom, -hood, -ship, for instance, do not have the derivative range the corresponding German suffixes have. On the other hand, such a suffix as OE -bêre, the counterpart of G -bar, had died out by the Middle English period, for reasons not connected with the Norman Conquest.

4.1.37. Suffixes may be 'synonymous' in the same way as full words are, viz. they partially overlap semantically. As far as New Yorker, Chicagonian, Manhattanite, Viennese are concerned, the four suffixes represent the same

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1 The sfs -hood and -ship are not dead, as is wrongly asserted in F. Mosse, Esquisse d’une histoire de la langue anglaise, p. 95.
IV. Suffixation

concept ‘inhabitant of . . . ’ (for a parallel case of inflectional endings compare L amic-i, reg-is, exercit-us). They are what American linguists call alternants while Bally speaks of suppletion. However, each one suffix has a different totality of semantic features. No two combine alike formally or with the same intellectual or emotional connotation, though in particular cases two types are very nearly interchangeable (cf. the suffixal extensions -ableness and -ability, 4. 55. 4). But the fact remains that interchangeability applies only to certain pairs, i.e. it is never more than partial. Any one sign is determined by the totality of combinations in which it may occur and which cannot be the same as that of another sign.

4.1.38. The difference between a prefix and a suffix is that a prefix is an extinct first-word while a suffix is an extinct second-word, historically speaking. As the first element of a combination is not the grammatically dominant part, the prefix can only modify the word to which it is affixed without having any hold on its grammatical position. A prefixal derivative joins the category the unprefixled word belongs to. In a suffixal derivative, however, the suffix is the grammatically dominant part. In most cases, it is also the semantically dominant element and the determinatum of the syntagma. In combinations such as father-hood, father-ly, the word father merely determines what is essentially a ‘-hood’ or ‘-ly’ respectively. There is, however, a certain category of suffixal syntagmas where the relationship is reversed. Combinations based on the underlying theme of appreciation stand out as exceptions. Types of this kind are substantives with a diminutive (endearing) or pejorative suffix (daddy, boykin, booklet, squireling), adjectives with an approximative suffix (yellowish, bluey), verbs with a diminutive or frequentative suffix (patter, crackle). Semantically speaking, a daddy is still basically a dad, a booklet still a book, a squireling a squire. The quality of yellow is only restricted in yellowish, and crackle merely refers to a series of crack noises. These are therefore cases of syntagmas in which the determinatum precedes the determinant. With compounds we have a similar case in appositional combinations such as fisherman, messenger boy where the first element dominates semantically.

The preceding cases of a suffix determining the radical help to explain how sometimes prefixes (which are determinants by nature) and suffixes express similar ideas. There is apparently no great difference between the types yellowish and unhappy as both affixes have determinant character. Cf. also L permagnus ‘very great’ and E greatish ‘somewhat great’, L florescere and G erblühen (both denoting incipient action or incipient change of state). These observations do not, however, invalidate the general principle that a prefix is the determinant of a syntagma whereas a suffix is the determinatum. Cf. 3.1.15.

4.2.1. -able /əb/.

English owes this suffix to Old French from which it borrowed words such as agreeable, comfortable, blamable, comparable, desirable, measurable, damnable, deceivable, profitable. changeable, favorable, passable, serviceable, reason-able, acceptable, commendable, determinable, all ME.
As we see, all these loans could be analysed as English derivatives also, since the basis without -able existed either as a substantive (measure, service, reason), or as a verb (accept, agree, change, commend, deceive, desire, pass), or might be both (as in comfort, profit, favor). Thus the type looked both denominal and deverbal. To this morphological dualism was added a semantic one: the words with verbal bases had partly an active, partly a passive sense, 'fit for doing' or 'fit for being done'. Active were durable, variable, agreeable, comfortable, deceivable, passive acceptable, blamable, commendable, comparable, desirable, both meanings we have in passable and changeable. All these functions of -able English inherited from French which had itself found them in Latin. English has formed new words on the basis just described.

4. 2. 2.  Deverbal derivatives have always been more frequent than denominal ones. The early deverbal adjectives in -able have sometimes an active meaning (see below), but the general tendency has been to coin words with a passive meaning. This is probably due to the predominantly passive character of the loans from French and Latin. Cf. e.g. allowable (in obs. sense 'laudable'), in-nominable arch., innumerable, tolerable, all ME, revocable 1471, memorable 1483, navigable 1527, admirable 1596 (the stress shows that the word is not derived from admire v.; the same with revocable, the derivative equivalent of which is revokable 1584).

4. 2. 3.  English derivatives occur from the 14th c. on, almost simultaneously with the afflux of loans. From the very beginning, the suffix is tacked on to French as well as native roots. It was perhaps associated with the (unrelated) word able, its early use with native stems is otherwise not easily accounted for. Only -age and, to a lesser extent, -ard were so easily combined with native words.

Exs.: Understandable (Wycliffe), believable 1382, eatable 1483, available 1451, determinable 1458 H, appeasable 1549, readable 1570, alterable 1574, approachable 1571, controllable c 1576, countable 1581 H, accountable c 1583, conquerable c 1599, drinkable 1611, achievable c 1630, advisable 1647, appealable 1622, attainable 1647, breathable 1731, writable 1782, adaptable 1800, attackable 1813, classifiable 1846, copyrightable 1903.

4. 2. 4.  Right from the beginning we have numerous coinages prefixed with un- which are very often much earlier than their positive counterparts. I give some examples, the dates in parentheses being those of the unprefixed words: unspeakable c 1400 (1483), unknowable 1374 (1449), unthinkable 1430 (1854), unamendable c 1450 (1589), unbearable 1449 (1550), unbreakable 1480 (1570), unaccountable 1582 (c 1646), unavoidable 1577 (c 1638), unclimbable 1533 (c 1611), unconsumable 1571(1641).

4. 2. 5.  Beginning with the 16th c., -able is used with postpositional vbs, either with the sf tacked on to the phrase, as in come-at-able, uncome-at-able, get-able, unget-at-able, or with the sf put between vb and postposition, as in liveable-with, liveable-in, unspeakable-to, unget-on-able-with (a combination of the two preceding types). But usually the particle is dropped. This is the type which usage appears definitely to have decided upon. Exs are reliable, dependable, available, dispensable, laughable, livable, unaccountable, unspeakable, unswimmable, drivable (as a road).
4.2.6. As we have seen, some loans from French had an active meaning ('able to do' etc.). In English we have a few coinages of this type: *suitable* 1582 (following *agreeable*) and *speakable* 1483—1676; it may, however, have helped to bring about *answerable* 1548 'responsible' (in the sense 'able to be answered' the word is more recent (1697) and rarely used). *Alterable* 1526 H 'which changes' (obs.) was coined after *changeable*, *variable*. Some other verbs of the move and change class which have no object followed: *decayable* 1617, *perishable* 1611, *unshrinkable* 1885.

4.2.7. Denominal derivatives have never been frequent. The pattern existed through loans from French, such as ME *reasonable*, *customable* 'customary, habitual', *measurable* 'moderate' (as a deverbal coining with a passive sense it is first quoted in 1599), *profitable*, *honorable*, *charitable*, *proportionable*, *comfortable*, *favorable*, *serviceable* which all had the basic meaning 'characterized by . . . , showing . . . in a specific manner'. English coined *treasonable* 1375, *seasonable* 1380, *merituble* 1415, *personable* c 1450, *available* 1502 'effectual' (after *profitable*), *leisurable* 1540, *actionable* 1591, *fashionable* 1606 (unfashionable 1563), *sizeable* 1613. *Reasonable* may have given rise to *knowledgeable* 1831 ('one who shows reason', 'one who shows knowledge'). *Companionable* 1627/77 follows *personable*, replacing *companable* c 1340—1611 and *companiable* c 1326—1822, both repr. OF *compaignable*. *Customable* developed the meaning 'liable to duty' 1529 H, which gave rise to *dutiable* 1774 with the same meaning. The loan word *honorable* ME 'worthy of honor' attracted *creditable* 1659, *respectable* 1586, *reputable* 1611. The now rare words *conscionable* 1549 'accordant with good conscience, just' and *unconscionable* 1565 must be based on a substantive *conscion*, as *consciencd* 1541—1627 and *conscionless* 1607—1617 show. It is supposed that the word, in the 15th and 16th c., was formed as a "singular" of conscience which was perhaps considered to be a plural, as the occasional spellings *consions* or *conchons* seem to suggest. This is the opinion of the OED (based on F. Gall, On English Adjectives in -able, London 1877). In this case *conscion-able* also would be parallel to *reason-able*. *Pleasurable* 1579 joins the group *comfotable*, *favorable*, *serviceable* with which it forms a semantic family. The word *lovable* c 1340 which the OED explains from the verb *love* probably falls under the same semantic heading as the preceding group. It is derived from the sb *love*, as *comfortable* seems to be from sb *comfort*. Cp. the first quotation from Hampole (c 1340): *Thesu, deserabill es thi name lufabyll and comfortabyll*. It renders L *amabilis* (cp. 1483 Cath. Angl. 222/2 *Lufabyll . . ; amabilis*, q. OED s.v. *lovable*). ME *paysyble* (f. OF *passible*) which semantically also fitted the group was in the 16th c. refashioned into *peace-able*.


4.2.9. Suffixation with *-able* involves no phonologic changes as compared with the basis. This applies also to the great majority of original loans insofar as they are now analysable as English derivatives. Exceptional is *damnable* (OF, L) which has preserved its [n] as against *damn*. 
4.2.10. With Latin-coined verbs in -ate the usual derivative alternation is -ate/-atable: cultivate/cultivable, demonstrate/demonstrable, educate/educatable, irritate/irritable, isolate/isolable, formulate/formulable, negotiate/negotiable, navigate/navigable, separate/separable, repatriate/repatriable.

However, the alternation -ate/-atable (marking a shift from wfb to wfnb) is also found: create/creatable (1678) 1848, implicate/implacable, narrate/narratable 1852, irrigate/irrigatable 1836 DA (= irrigable), educate/educatable 1868 DA, cultivate/cultivable 1847.

4.2.11. -ible is a spelling variant of -able, used to anglicize actual or possible Latin words in -ibilis. Perfectible 1635 is such a word. A Latin perfectibilis does not seem to exist, but if Latin had formed a derivative from perfectere, it would have taken that form. English coinages in -ible after the Latin fashion are not frequent. They go together with the real borrowing of French words in -ible or Latin ones in -ibilis (audible, convertible, convertible, corruptible, credibie, discernible, divisible, fallible, visible etc.). To this latinizing trend we owe eligiible 1561 (if it is not F éligible), discerptible 1736. Invertible 1881 ‘that can be inverted’ or ‘that tends to invert the usual order’ is formed after convertible ME; derisible 1657 after risible 1557 (= LL risibilis), reversible 1648 after convertible 1660 (= LL reversibilis) and perhaps some others. The type is rare.

Note: forcible ME is OF forcibe.

4.3.1. -acy /æsi/ (type pirate/piracy)

is a suffix due to Medieval Latin and Old French. It corresponds to ML -acia resp. OF -acie (another spelling is -atia, whence the OF doublet -atie). The first words came into English in the 14th c. when classical Latin did not yet play the role it assumed later. I mention this because some of the Medieval Latin words in -acia had ended in -atio in Classical Latin, e.g. ML procuratio and obstinatio. For others no such change is quoted in Du Cange (I have used the edition of 1733). No *conspiracio is recorded, but OF conspiracie suggests its existence. It seems that there was a tendency to substitute ML -atia for CL -atio. Anglo-French has confederacie which can only go back to *confederacio (CL confederatio). Our assumption will also account for E lunacy 1541. This word cannot be derived from lunatic ME as the OED explains it. On what type should the formation be based? The sf -atic never leads to -acy. Lunacy probably represents a non-attested *lunacia for regular ML lunatio ‘menstruous lunae cursus’ Du Cange; that kind of insanity was considered to be connected with the course and the changes of the moon). Lunatic is a separate loan = ML lunaticus. Jespersen’s explanation that lunacy is f. lunatic on the analogy of diplomacy/diplomatic is impossible (see 4.3.4).

4.3.2. On principle, Old French words in -acie go back to Ancient or Medieval Latin words in -acia. We do not, however, find a Latin original for each Old French word. Du Cange has obstinatio, papatia, fallacia, efficacio, but no Old French counterparts of these words are quoted. They may have existed, though. English has drawn on both Old French and Medieval Latin. The results of this borrowing are: advocacy (OF and ML), conspiracy (OF, no ML), papacy (no OF, ML), prelacy (OF and ML), primacy (OF and ML), all ME.

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Fallacy 1481 is L fallacia, efficacy 1527 L efficacia; no French parallels are recorded. After primacy was formed supremacy 1547 (F suprématie 1688 is a loan from English), after papacy the word episcopacy 1647.

4.3.3. Apart from these few coinages English -acy, in the preceding group, is a mere termination in anglicized loans from Old French or Latin. It has, however, proved to be productive for derivation also. We see that some of the preceding loans are substantives denoting state or quality, sometimes also collectivity. These and the substantives or adjectives denoting the bearer of the quality or state, or the individual of the collectivity, very often formed phonetic pairs insofar as the former ended in -acy and the latter in -ate. Even in Medieval Latin and Old French we had pairs such as ML advocatus/advocatie resp. OF avocat/avocacie, ML praelatus/praelatia resp. OF prelat/prelacie, ML obstinatus/obstinatia resp. OF obstinat/ (app. no OF). In Middle English we have the full pairs prelacy 1205 / prelacy 1325, advocate 1340 / advocacy 1413, obstinate 1340 / obstinacy 1390, confederate 1387 / confederacy 1387. Hence the tendency arose to supply a word in -acy where the word in -ate existed, i.e. the tendency to derive sbs in -acy from sbs or adjs in -ate. Derivation was made from any word in -ate of Romance origin regardless of its morphological appurtenance. Prelate goes back to praelatus which is a participial adjective, morphologically belonging to the o-declension; to this group belong most of the words in -ate. But magistratus is a u-stem, and pirate goes back to pirata, an a-stem and Greek loan. The substantive in -acy denotes the state or quality of being what the basis in -ate implies. Sometimes also the derivative develops a collective meaning. Examples are:


4.3.4. The correlation -ate/-acy is valid only for -ate words, pronounced [t] or [ɛt] (i.e. chiefly words in which the sf historically represents L -atus). Cases of -at [ɛt] (which have another origin, historically speaking) are not relevant. The non-homological stress pattern of démocra/t/democracy, aristocrat/aristocracy, plutocrat/plutocracy, diplomat/diplomacy goes to show that these pairs were not formed after, or have not entered the correlative type under discussion. They are also different historically. Aristocracy 1561 and democracy 1574, ultimately OGr words, came into English through the medium of French (like the corresponding adjs aristocratic 1602, democratic 1602). From the adjs were back-derived in French the sbs aristocrat and démocrate as terms of the French Revolution, and there adopted into English. On the analogy of aristocracy/aristocrat, democracy/democrat have been derived diplomat 1813 fr. diplomacy 1796, plutocrat 1850 fr. plutocracy 1652.
4. 4. 1. -age /ədʒ/ ¹

is a sf with impersonal denominal and deverbal sbs. The morpheme came into the language through loans from French (beg. with the 13th c., see Gadde 50/51). In Old French the sf -age (fr. L -āticum) formed denominal and deverbal derivatives, and the majority of meanings we observe with E -age are inherited from French. The suffixal type was very strong in Old French and Anglo-Norman and exercised a great influence on Medieval Latin insofar as it gave rise to many ML words in -agium, as barbicanagium, carrucagium, chiminagium, pondagium, partagium, scutagium, surplusagium, wharragium ‘wharfage’ a.o. These words belong chiefly to the sense group ‘right, liberty, toll’. Several of the English words listed below were for a long time quoted in Latin form only, as stowagium ‘stowage’, thanagium ‘thanage’ a.o.

4. 4. 2. Derivatives from personal sbs have the meaning ‘condition, state, rank, office of . . .’, also ‘collectivity of . . .’. Exs of loans are baronage, bondage, parsonage, vassalage, thanage (1200 in L form thanagium). An early Ec is barnage ‘infancy’ 1325 now obs. From the 15th c. are recorded brokerage, peerage, umpirage. Later are baronetage, brigandage, butlerage, clientage, companionage, knightage, matronage, orphanage, peonage, pupilage, squier(e)age, tutele (f. obs. tutele in same meaning), tutorage, the recent AE readerage ‘collectivity of readers’. In baronage, baronetage, companionage, knightage, peerage, squier(e)age we have the additional meaning ‘list of . . .’.

4. 4. 3. The analogy of hermitage ‘abode of a hermit’ (= OF) attracted parsonage 1472 H, vicarage 1530 H, anchorage 1593, cooperage 1714, orphanage 1865 H, the recent AE teacherage (ASp Oct. 1936, but the word is hardly current).

With derivatives from non-personal sbs we find the sense ‘collectivity’, material as in baggage 1430 (= OF) and later cellarage, flowerage, freightage, fruitage, frontage, gunnitage, harborage, lairage, leafage, leverage, oarage, pipage, scaffoldage, spindleage (1921), tentage, tankage, trackage AE ‘tracks of a railway’, vaullage, immaterial in surplusage 1407 (ML surplusagium) and later percentage, rentage, wordage. As for the notion ‘place’, the word cottage ME belongs in the group as well as village ME though it is doubtful whether the words have ever been felt to be connected with cot resp. vill. After bag and baggage, Sh coined scrip and scrippage.

4. 4. 4. A variant of the ‘collectivity’ type is the t. mileage, forming words denoting the total of measure units. There is no French pattern, on the contrary, French has partly imitated this English type (F tonnage 1793 and voltage 19th c. are prob. loans). Coinages are 18th c. and later, as acreage, footage, poundage, tonnage, voltage, yardage.

4. 4. 5. Many OF words had the meaning ‘liberty, privilege’ or ‘toll, duty’ connected with the privilege. We have already pointed out that many of these words occur also in Medieval Latin as words in -agium. Loans are fullage,

¹ F. Gadde, On the history and use of the suffixes -ery (-ry), -age and -ment in English. Lund diss. 1910 (esp. 50—69).
pavage, portage, but the type became early established. Ecs are poundage ‘tax ... per pound’ 1399 (yielding Anglo-Latin pondagium), obs. groundage 1440, cranage 1481, butlerage 1491, keelage 1500. In later coinages we cannot always distinguish between denominal and deverbal derivation, the general sense being ‘charge, fee connected with ...’. Ecs are anchorage, bailage, beaconage, brokerage, cartage, corkage, dryage, expressage, haulage, havenage, housage, moorage, portage, postage, poundage (f. vb pound ‘impound cattle’), pilotage, quarterage, quayage, standage, storage, tankage, wharfage, yardage.

4. 4. 6. Occasionally other senses occur, as in leverage, oarage, porterage ‘action, power of ...’, postage, telpherage ‘conveyance by ...’, windage, a technical term, meaning ‘deflection caused by the wind’ etc., gunnage in sense ‘money distributed among the captors of a ship according to the number of guns’, problemage 1928 ‘state of being a problem’.

4. 4. 7. ME borrowings from OF are such word pairs as arrivage/arrive, carriage/carry, coinage/coin on the analogy of which were formed other deverbal impersonal sbs, from foreign as well as native stems. Originally, we find only derivatives with the sense ‘act, fact, mode of ...’ which was the one French has chiefly developed. Ecs are stowage 1352 (orig. in L form stowagium), cartage 1428, ferriage 1450, steerage 1450, stoppage 1465, obs. mockage 1470 (common in 16th and 17th c.), leakage 1490. Later are recorded anchorage, corkage, drainage, driftage, dosage, dotage (which attracted joc. anecdotage and sacerdotage), flowerage, fosterage, fruitage, floatage, moorage, pipage, plunderage, pondage, siphonage, storage, tannage, trackage. Package 1611, too, had first the meaning ‘act, fact, privilege of packing’.

4. 4. 8. The meaning ‘place of ...’ has developed with such words as anchorage, moorage, bearthage, standage ‘stall’ (obs.), ‘underground reservoir for water’, storage. Other concrete senses show floatage ‘that which floats’, luggage, orig. ‘that which is lugged about’, package, brewage. An unusual sense underlies the mining term leadage ‘distance that coal has to be conveyed from the mine to a sea-board or railway’.

4. 4. 9. Very frequent is the meaning ‘result of ...’, as in sweepage 1628 and later breakage, coverage, driftage, flowerage, seepage, shrinkage, spillage, spillage, soakage, spoilage, tankage, wastage, wreckage a.o. Sewage is influenced by drainage, formed as if from a vb *sew from which sewer was derived. But there is also the normally derived word sewerage.

4. 4. 10. Most words belong to several sense groups, and many derivatives are at the same time denominal and deverbal (anchorage, flowerage, pilotage, pipage, postage, tankage a.o.). Formatively isolated are roughage ‘rough or coarse substance’ etc., shortage ‘want, insufficiency’ with the AE counterpart overage, a banking term. Viduage 1832 is coined f. L vidua.

4. 4. 11. Words such as bandage, visage, voyage are loans from French which have no derivational connection with any English word. Words borrowed from French in recent times are no longer incorporated in the suffix group.
Exs are *massage* 1876, *camouflage* 1917, *sabotage* 1910, pronounced [az]. In other cases, *-age* is a mere adaptational termination: *cabbage* for ME *caboch* (f. F *caboch*), *sausage* (f. ONF *saussiche*), vintage is AF *vintage* which is altered f. *vindage*, *vendage*, OF *vendange* = L *vindemia*. Cartilage, image, *putillage* a.o. represent Latin words in *-ago* in their French form. *Scrimmage* has, of course, nothing to do with *scrim* ‘canvas’, but is corrupted from *scrimish*, *skirmish*.

4.4.12. Derivatives in *-age* are outspoken technical terms in that they bear the mark of a special milieu, professional or otherwise, in which they were coined. This does not, however, prevent the words from having general currency. The ‘result’ group is especially common in this respect.

4.5.1. *-al* /æl/ (type *arrival*)

forms sbs of action chiefly from verbs of Latin or French origin. Neither the OED nor the grammars say anything convincing as to how *-al* became an English formative. The OED explains the rise of the sf on the analogy of OF *espousailles* and *bataille* which were adopted as *spousail* and *bataile*. E *bataile* does not, however, count as a pattern, as it had no verb to go with in English. E *spousail* 1300 could be analysed as a derivative from the older verb *spouse*. Other loans are *arrival* 1384 and *supposal* 1380, both accompanied by older verbs with which, therefore, derivational connection was naturally established. No OF or AF pattern appears to be recorded for *rehearsal* 1386, which may, however, be due to an incidental gap in our lexical material. The verb *rehearse* is older (1340). By 1400, *-al* was certainly an English formative, though some of the words recorded after 1400 have OF or AF counterparts and may therefore be considered loans (e.g. *acquittal*, *trial*, *refusal*, *reprisal*, *rental*).

4.5.2. From the 15th c. are recorded *acquittal*, *refusal*, *reversal*, from the 16th c. *removal*, *reprisal*, *recital*, *requital*, *denial*, *trial*, *survival*, *remittal*, from the first half of the 17th c. *committal*, *reposaid*, *disposal*, *proposal*, *refutal*, *revival*, *recepial*, *renewal*, *restoral*, *approval*, *perusal*, *retiral*, *suppressal*, *surmisal*, *retrieval*, *deprival*, from the 18th c. *avowal*, *carousel*, *suppliant* (now rare), from the 19th c. *appraisal* 1811 *dismissal*, *arousal*, *betraysal*, *demersal*, *transferral*.

From the end of the 18th c. on, derivatives from end-stressed native verbs also occur, as *bestowal* 1773, *withdrawal*, *indrawal* (no vb, formed after prec.), *upheaval*, *betrothal*, *beheadal*, *uprisal*, *uprootal* (19th c.). *Reappraisal*, *referral* and *deferral* (not in OED or Spl.), used in AE, seem to be recent.

4.5.3. In contradistinction to *-ance* which is a derivative with durative verbs, the sf *-al* is tacked on to verbs implying a final result. There are a few exceptions, such as *rehearsal* (which is prob. no Ec), *recital* (formed after prec. in the same legal sense), *trial* (which is a loan from AF). That the verbs are end-stressed (Jespersen) is right, but does not seem to be the main point: *interfere*, *consist*, *guide*, *pursue* and others are also end-stressed, but derive sbs in *-ance*, *-ence*.

1 Y. Malkiel, Three Old French sources of the English ‘arrival’, ‘withdrawal’ type, *JEGPh* XLIII, 1944, 80—87. OF *-aille*, *-al*, *-ail* all become naturalized as *-al*. 
IV. Suffixation

4.5.4. Strangely enough, English has borrowed from French words of a type which is otherwise scarcely made use of in French. The origin of F -alie is L -alia, as in carnalia, genitalia, inguinalia, Floralia, Lupercalia, Saturnalia. The form -alia is the plural of adjectival -al, the neutral form of -alis (which is represented by adjectival -al in English), expressing plurality and collectivity. French derivatives are almost all denominial, instances of deverbal derivatives are rare in OF. It is, however, probable that the deverbal type was developed in AF. The earliest English words are all legal terms (rehearsal, acquittal, reprisal, reversal, refusal), and the terminology of Law was French.

Spousal understood as 'nuptial ceremony' attracted native bridal, which is by origin bride-ale. But 'bridal', with the stress and sense of ale quite suppressed, occurs before 1300 (OED). Burial ('singularized' from OF byrgels 'burying-place' is quoted in sense 'interment' for the year 1453, prob. under the influence of spousal and bridal (one might think of the influence of funerall, which is not, however, found before 1512).

4.6.1. -al (zial, zical, -oidal, -orial, -ual) /əl/

English owes this suffix to Latin, Classical, Medieval and Modern, from which it has adopted innumerable words. The Latin form of the suffix is -alis.

In CL we find words such as autumnalis, hernalis, finalis, mortalis, municipalis, muralis, naturalis, corporalis, manuallis, natalis, gregalis, pastoralis, pontificalis, regalis, mensalis, navalis, parentalis, matronalis, virginalis, contubernalis. The meaning of the suffix is 'which is like, has the form of, the character of, is in the way or nature of...', then more loosely 'belonging to...'. The number of derivatives grew considerably in LL where we find filialis (after parentalis), criminalis, idealis, orientalis a.o. The suffix was also tacked on to Greek roots. To normalis, theatralis, which are already classical, came to be added baptismalis, astralis, hebdomadalis, patriarchalis a.o.

The anglicized form of L -alis is -al, which is found in countless words with a Latin or Greek basis.

Many of the present-day English words have never existed in Latin. It would therefore be an erroneous standpoint to be always looking for the Latin original or the French pattern of a word (which the OED often does). The existence of an actual patrimom is irrelevant so long as, potentially, the coinage is Latin. Why should foetal, fetal be F foetal, if there are words such as local, focal, which are also derived from -o stems. The words federal and eventual are said to represent F fédéral resp. éventuel (OED). Not only is this impossible because the French words are recorded much later than the English ones (E federal 1645, F fédéral 1792, E eventual 1612, F éventuel 1718), but the principle of assuming an actual original is wrong. The Latin stem is foeder- resp. eventus- with the same basis as in sider-al, later-al, tempor-al resp. sensu-al, spiritu-al, manu-al, gradu-al, which are older.

4.6.2. To most English words we can attach the sf because the English word represents the Latin resp. Greek stem. Thus the process of coining is really on a native basis. Exs are accidental, incidental, actional, architectural, basal, cantonal, cataclysmal, catarrhal, causal, chasmal, commissural, conjunctural, consonantal, continental, constitutional, institutional, creatural, cultural, dialectal,
diphthongal, monophthongal, documental, edictal, electoral, elemental, feudal, fictional, fractural, futural, global, herbal, hormonal, humoral, phantasmal, prefectural, procedural, protectoral, scribal, suicidal.

Latin-coined are such words as balneal, clostral (see 4.1.13), horizontal, societal (see 4.1.13).

Derivation from a non-latinizing English basis is quite recent. Exs are seasonal 1838 (after words in -ional), pivotal 1844, postal 1843 (perh.? after F postal 1539), credal 1879 (but note the frequent spelling creald after L credo), coastal 1883, featural 1883 (after other words in -tural), environ-mental 1887 (after other words in -mental). Nounal 1871 is hardly common. Tribal 1623 is now connected with tribe, but was perh. originally meant as a derivation from L tribus (the derivative tribual 1650 has not survived).

Derivation from native words is not common. Tidal 1807 (there is also cotidal) may have been influenced by sideral, hundredal 1862 ‘belonging to a territorial hundred (subdivision of a county)’ is possibly influenced by territorial. There is also an old burghal 1591 f. burgh.

Non-committal 1851 is the sb non-committal 1836 used adjunctively (i.e. the -al of t. arriv-al).

4.6.3. In AL we have also derivatives in -alis from substantivized adjectives, such as infernalis fr. inferna ‘the world below’, aequalis fr. aequum ‘the being equal’. Such extensions looked like derivatives from the adjectives infernum and aequus, and subsequently other extensions followed. Quintilian (II.13.14) forms perpetualis to render Gr katholikos ‘general, universal’, and in LL we find vernalis, extended fr. CL vernus (after autumnalis, hibernalis), annualis (CL annus), aesternalis, sempiternalis (CL aeternus, sempternus). The foregoing adjectives, as we see, all belong to the sphere of ‘time’. Church influence adds the tinge of ‘transitoriness’ resp. ‘eternity’, hence LL temporalis and OF temporel. Following this line, Old French formed celestial (which English borrowed as celestial ME), and English, independently, continued with the counterpart terrestrial LME and the word corporeal 1610 (after celestial, mortal and others of the ‘salvation’ sphere). With the exception of terrestrial and corporeal, English has, in this semantic field, only loans from Latin or Old French. The following ‘family’ words are also loans: paternal, maternal, fraternal are ML paternalis, maternalis, fraternalis (for CL paternus, maternus, fraternus), coined after CL parentalis and LL filialis (which gave parental and filial in English).

4.6.4. English coinages are the extensions of Latin adjectives in -arius (a few in -sorius), derivatives from personal substantives in -tor (-sor). The type pictorial arises in the 16th, but is more freely used in the 18th and 19th c.: praetorial 1579, censorial 1592, amatorial 1603, pictorial 1646, imperatorial 1660, dictatorial 1701, professorial 1713, senatorial 1740, tutorial 1742, propraetorial 1885, procuratorial 1726, gladiatorial 1751 are either words which belong to Ancient Rome or have an academic ring of weightiness. Only a few of them seem devoid of this academic tinge, as dictatorial, senatorial which have acquired importance through the political events of our times. The analysis of words of this group is of course now praetorial f. praetor etc.

After such adaptations of Latin adjectives in -arius, English derived adjectives in -ial from other agent substantives in -or, as visitorial, gressorial (birds), saliatorial (insects), volitatorial (birds), conspiratorial, editorial, equa-
torial, mediatorial, monitory, proctorial, proprietorial, rectorial. After editorial is coined reportorial (fr. reporter, 1858 DA), which sounds, however, rather journalese.

If the sf -ial is tacked on to words in -ent, -ence, -stance which is only possible when they represent actual or possible L words in -ens, -entia, -stancia, never when the words are mere English suffixal derivatives, we get the derivative alternation -ent-[-ential], -ence[-ential], -ance[-ential] = [s]/[s] resp. [t]/[s]. Exs are agent/agential, confident/confidential, president/presidential, provident/providential, prudent/prudential /// difference/differential, reference/referential, existence/existential, essence/essential, residence/residential /// circumstance/circumstantial, instance/instantial, substance/substantial. The productivity of the type appears from comparatively recent coinages such as deferential 1822, preferential 1849, interferential 1880, transferential 1889, derived from older words in -ence. From microbe is derived microbial (besides less usual microbal).

After the pattern minister:ministerial (the latter is L ministerialis) managerial 1767 has been derived from manager.

4. 6. 5. There are also derivatives in -al from personal sb in -tor. But this type, which is older, has only formed a few words: rectoral (only with reference to God, in contradistinction to the profane rectorial), protectoral (a word coined during the period of the Cromwells, possibly in imitation of rectorial). Other words are electoral 1675 and doctoral 1563/87.

Congressional 1691, semantically belonging to congress (esp. the Congress of the United States), is formed with the basis congression which was formerly used as a variant of congress.

There is no Latin pattern in -orius for either of them. On the other hand, -orial has been in favor with personal substantives since the 17th c., and the preceding words received forms in -orial also: electoral 1790, doctorial 1729, protectorial 1806 (perh. supported by LL protectorius). The common words are, however, those in -al (cp. electoral law).

4. 6. 6. The OED (s.v. -orial) gives the misleading explanation that “these adjs. in -orial are usually identical with those in -ory, and the two forms are not rarely found side by side (e.g. piscatorial, piscatory)”’ This does not seem to be quite correct. First, there are not so many instances of pairs, and then, the pair words are not synonymous. Auditory 1578 is L auditorius and has the meaning ‘pertaining to hearing or the sense or organs of hearing’, whilst auditorial 1859 is connected with auditor (or auditorium). Accusatorial 1823 has the meaning ‘pertaining to an accuser’ and is thus connected with L accusator (rather than with obs. accusator ME); accusatory 1601 is a Latin loan (accusatorius) and means ‘of the nature of an accusation’. Mediatorial is connected with mediator, mediatory is not; dedicatorial, if ever used, connotes dedicatory. Moreover, mediatory and dedicatory connote mediation resp. dedication. This is the general mark of differentiation: words in -orial are derivatives from such in -or, meaning ‘belonging to, having the character of the person’. Words in -ory connote the substantive in -ation (for more detailed treatment see -ory), they are not derivatives, but anglicizations of actual or possible patterns in -orius. That is why some words in -orial are marked ‘rare’ in the OED: observatorial 1816 (in collocation such as ‘observatorial purposes, ‘observatorial work’), investigatorial 1808 (‘investigatorial procedure’), migratorial 1865. Their meaning is always connected with the substantive in -ation. Gestatorial 1864 is only used in the cb gestatorial chair (of the pope), preferred to the rare gestatory 1682.
on account of the nuance of weightiness which -orial conveys (both words are mere renderings of L *gestatorius*). This nuance may be used for stylistic purposes, as when we speak of a ‘t tonsorial artist’, meaning a barber.

Adjs in -orial may also be derived from words in -orium, as sensorial 1768, suspensorial 1871, tectorial 1859, all scientific terms.

4. 6. 7. We have already said that in AL the suffix -alis was also tacked on to Greek loans. Here we are interested in a particular formal group. From grammatica and musica were derived grammaticalis LL and musicalis ML. On the other hand, the direct loans grammaticus and musicus had long been in existence, and the new coinages came to look like extensions of them (a parallel phenomenon with Latin adjectives has been treated under 2). Physica, thus doubling physicus CL. Such pairs became a favorite type of derivation in English. Partly through the medium of Old French, English borrowed the pairs music 1250 / musical 1420, physic 1297 (in the now obs. sense of ‘medical profession’ which ML had developed as against the AL meaning ‘physics’) / physical 1447. There were also other names of sciences in -ic (corresponding to present-day -ics which becomes the rule after 1500) which English had taken from Latin or French, such as logic, arithmetic, magic, rhetoric. With the exception of magic, the prevalent adjectives are in -ical: rhetorical 1476, arithmetical 1543, logical 1500.

4. 6. 8. There was a second current in the language tending to adapt Greco-Latin adjectives in -icus into -ic. This co-existence of synonymous pairs has caused a competition the result of which we will try to describe. We may anticipate that, at all times, derivation from names of sciences has shown a preference for extension in -ical. The by-forms in -ic are, as a rule, weaker and newer than the extended forms (cp. B. Danielsson, 222). Of the earliest group of words, logical and musical have never had rival words in -ic, rhetoric is rare; obs. arithmetic is quoted only for a short time (1652—1767). The same tendency is to be observed for later adaptation of adjectives in -icus, whether they were derived from names of sciences in -ics or not (as geographical, theoretical from geography, theory), also in cases where the root is not the name of a science at all (identical, tropical etc.). That the original tendency was towards extension is illustrated by the frequent occurence of earlier extended forms in -ical: poetical 1384 (-ic 1530), tragic 1489 (-ic 1545), mathematical 1522 (-ic 1549, rare), analytical 1525 (-ic 1590), grammatical 1526 (-ic 1599), comical 1557 (-ic 1576), geographical 1559 (-ic 1610, rare), tactical 1570 (-ic 1604), theoretical 1616 (-ic 1656), pedagogical 1619 (-ic 1781), identical 1620 (-ic 1649). Priority in time of the unextended forms is much rarer. Two examples are tropologic 1380 (-ical 1528) and politic 1420 (-ical 1551).

4. 6. 9. The origin of the extended suffix -ical is thus to be sought in adjectival derivation from names of sciences in -ic. If we look at the foregoing examples, the priority of economic to economical and politic to political seems to contradict this. But it should not be overlooked that the basic substantives were not names of sciences in ME: politics ‘science of government’ is first attested in 1529 (OED) and the corresponding derivative is political 1551. Economics as the name of a science is first quoted in 1792 so that both economic adj and politic adj go well with the above rule. An exception is magic ME (fr. F magique),
which is earlier and stronger than *magical* 1555, probably because it became fixed at an early stage through set expressions such as *magic art*, *magic glass*, *magic circle*.

4.6.10. There was, at the beginning, indiscriminate coexistence of two synonymous adjectives. But language does not like to have two words for one and the same notion, and competition was bound to come. What happens in a case of a clash of two synonymous words is usually this: as there can be only one survivor of the fight, one of the words will either be dropped or be given a specified meaning or function that distinguishes it from the original rival. In our case, the result has, however, been a compromise. On the one hand, the language has shown a tendency to throw out one member (usually the form in -ic) from common usage; on the other hand, it has often retained the second member in a specified sense (esp. in scientific terminology). Whereas, for example, *botanical*, *geographical*, *theoretical*, *theological* are commonly used, the counterparts in -ical are maintained only in long established names as *Botanic Gardens*, *Geographic Magazine*. The word *economical* today has the meaning ‘thrifty’, whilst *economic* means ‘belonging to the science of economics’. This characterizes the general tendency of differentiation: as derivatives in -ic are, morphologically speaking, derivatives from the basic substantive, they have notionally also a direct connection with the idea expressed by the root. On the other hand, formations in -ical are secondary derivatives, i.e. they are derived from adjectives in -ic by means of -al. This will partly explain why they usually have a remoter and looser relation to the basic substantive. A thing is *historic* if it is or makes history itself, it is *historical* if it belongs to what narrates or deals with history. Books on history are therefore only ‘historical’ while events are ‘historic’. A sound is ‘metallic’, as it is like metal. An engineer is ‘electrical’, as he has to do with electric things, but current is ‘electric’, is the thing in itself. A person is, however, ‘erotic’, not ‘erotical’, having in him the quality of ‘eros’. Similar distinctions can be made for the following pairs: identical/identical, comic/comical, theatric/theatrical, poetic/poetical, psychic/psychical.

4.6.11. I am far from saying that the problem of differentiation between adjectives in -ic and such in -ical is solved by the above explanation. There is another tendency, already mentioned, to use adjectives in -ical when the word is in wider, common use: geometrical, chemical, critical, clinical, surgical, typical, periodical, analytical, theoretical, theatrical, biblical are more frequent than their unextended counterparts; but such words as artistic, dramatic, dynamic, static, pathetic, aesthetic, apologetic, angelic are the ones commonly used.

4.6.12. A third factor is this: the scientist uses the unextended forms much more, as for him the quality expressed by the adjective is more directly and intimately connected with the thing to which it is applied than it is for a non-scientist (cp. our first argument above). Scientific terms are therefore mostly -ic: linguistic, semantic, phonetic, phonemic, tannic, toxic, electrolytic, magnetic, volcanic, pleistocene, tectonic, eolithic, geostatic, geodesic, sematic etc. The directness of relation and their corresponding designation is clearly seen in medical terms, which all have the suffix -ic, as they are generally applied
to phenomena of the body and therefore “primary attributes”: anemic, hyperemic, allergic, antiseptic, metabolic, gastric, gastrocolic, pneumogastric, pneumonic, metagastric, enric, neurasthenic, neuritic, nephritic, rachitic, asthmatic, apathetic etc. Though dictionaries often quote forms in -ical also, they are hardly ever used.

4.6.13. Exceptions to this tendency are words with a termination that also exists in the form of an independent word. Terms in -logical, for instance, are commoner than their by-forms in -ic. We say archaeological, genealogical, geological, palaeontological, physiological, psychological, biological, sociological, theological, philological etc. They are the words of the scientist resp. scholar himself, and exceptions are infrequent (we speak of a geologic period, physiologic conditions). This explains why we use phonetic and semantic, but usually morphological (besides morphologic) and syntactical (besides syntactic). The two first belong to the group of words discussed under 4.6.12, the latter follow the independent words logical and tactical.

4.6.14. What we have stated are tendencies rather than rules. Nothing is absolute, and it will be possible to find words used contrary to the general trend. As one of my American colleagues, a professor of physics, told me, the term electrical current is sometimes used by English scientists. And then, we speak of ‘electrical energy’ though the case is pretty much the same as with ‘electric current’.

4.6.15. Co-existence of -ic and -ical words is not absolute either. For the preceding medical adjectives we will hardly find counterparts in -ical. Other such words are: basic, semantic, drastic, aphoristic, aperiotic, alcoholic, artistic, barbaric, despotic, characteristic, civic, domestic, frantic, patriotic a.o. On the other hand, no -ic forms exist beside clerical, critical, cynical, logical, mechanical, musical, rhetorical, as the adjectives are derived from substantives in -ic. Jespersen overstates this tendency (MEG VI. 22. 36). Though “derived”, there are adjectives in -ic, as skeptic, magic, arithmetic, stoic, classic, semantic (going with semantics) a.o. Adverbs from adjectives in -ic and -ical are made in -ically. But catholicly, frantically, heroically, publicly are also found, publicly being the only possible form of the adverb. This is probably another reason which favors the dominance of -ical in commonly used words. In AE, /ikh/ has wide currency, see Kenyon-Knott, op. cit. Bibl. III, -ical. With scientific adjectives the situation is not the same, as they are chiefly used as predicate complements or adjuncts, not as adverbs.

4.6.16. The suffix -al is never used for derivation from proper names of persons, places, nations, or races (this function falls to -an, -ian; the OED quotes the uncommon word Petrrchal 1818). We cannot, therefore extend -ic adjectives of this group into -ical. There are only Miltonic, Byronic, Quixotic, Platonic, Aristophanic etc. Slavic, Gothic, Germanic, Teutonic, Hellenic, Vedic etc. We may, however, speak of Hellenistic or Hellenistical History, as Hellenists are no nation or race. A similar exception is Druidic and Druidical.

4.6.17. -ical is now felt to be directly tacked on to several learned words such as despotic, domical, conical, druidical, periodical, puritanical, eremitical,
parsonical but it has also established itself with a group of non-scientific words having the basic meaning ‘queer, odd, spleeny’. The now obs. frenzical 1547 seems to have attracted whimsical 1653, nonsensical 1655, which were later followed by coxcombical 1716 (often pronounced as if derived from comical), farcical 1716, lackadaisical 1768, quizzical 1789, twistical 1806. There are also found spleenical (Keats), hobbyhorsical (Sterne, Tennyson), pillarboxical (A. Huxley), good-sensical (Stephen Spender). The word whimsy itself which the OED cannot explain, was prob. coined under the influence of frenzy, by way of jocular extension.

4. 6. 18. After the pattern of twin adjs in -ic/-ical, adjs in -oid may also take -al. Exs are alkaloidal, asteroidal, concoidal, rhabdoidal, rhomboidal. But again, the scientist will prefer the unextended forms and speak of paranoid and schizoid persons.

4. 6. 19. From loans such as spiritual 1303 (F, LL), actual ME (F, LL), efectual 1375 (F, LL), textual 1386 (F), intellectual 1398 (F, L), conventual 1425 (ML), habitual 1526 (ML) which could be analysed as E word plus -ual /tjuol, ʃuol/, sprang coinings with this sf such as accentual 1610, eventual 1612—1615 (after conventual), textual 1642 (after visual), conceptual 1662 (after intellectual), factual 1834 (after actual), contractual 1861 (after actual, factual, actual), instinctual (rec., after intellectual and sensual). Only spiritual and the derivatives from a monosyllabic basis are homologically stressed after the radical; in the other words the stress lies on the syllable preceding -ual.

As all derivatives in -ual end in -tual, we may say in synchronic terms that derivatives are made from anglicized Latin words in -t on the alternation /t-tʃuol, tʃuol/. Historically, all the earlier words in -tual participated in the process of assimilation of EMoE unstressed /tʃu/ to /tʃu/.

4. 6. 20. Adjectives in -iac have by-forms in -ical: ammoniac, cardiac, demoniac, elegiac, hypochondriac, maniac, paradisiac; Aphrodisiac, Syriac have not. Only extended forms exist in the case of simoniacal, zodiical, the -ic forms being the substantives.

Stress and pronunciation vary according to one or the other form of the pairs. The type is [ˈsəˌmʌnəki/ˈseɪˌmʌnəki], i.e. -iacal is stressed on the first vowel, whereas with -ic words the stress is on the syllable preceding the -ic. Elegiac is pronounced [ˈelɪdʒɪək] or [ˈɪldʒɪək].

With the pairs -oid/-oidal the situation is this: -oidal is always stressed on the first syllable [ˈoʊdəl], whereas stress in -oid words, which are substantives at the same time, is that of the substantives.

Adjectives in -ical are stressed on the syllable preceding the suffix. The situation is the same as with -ian. Cp. also 4. 1. 22.

-al implies shift of stress as against the pattern of the basis only when the syllable preceding the sf is heavy through vowel or consonantal group (alkaloid/ alkaloidal, diphthong/diphthongal, orchestra/orchestr'al, ancestor/ancéstral, instrument/instrumental; but cf. 4. 1. 23). In this case the syllable preceding the sf is stressed. The stress does not go farther back than the antepenultimate (architecture/architectural, origin/original, hypochondriac/hypocondriacal).

For the stress history see B. Danielsson, 188—191.
4.7.1. -an (-ian) /æn/, /iən/

The Latin suffixes -anus and -ianus are not basically different from each other. The word in -anus denoted a person or thing belonging to a place, generally a town, but occasionally also a river or the like. The sf was chiefly tacked on to Italic place-names of the -a or -o declension: Romanus, Albanus, Cosanus, Cumanus, Coriolanus, Nolanus, Nomentanus, Syracuseanus / Padanus, Cispadanus, Transpadanus / Bosporanus, Cisrhenanus, Transrhenanus. There are also a few Greek names of the -a declension which take -anus, as Spartanus, Thebanus, Troianus. We have the sf also with nouns denoting types of localities, as urbanus, vicinus, insularus, montanus, paganus, rusticus, castellanus. Appurtenance to persons was expressed by the same sf. In this case it was, however, tacked on to the gentile name, designating one descendant from someone. As gentile names ended in -ius, the derivatives came to end in -ianus, as Cornelianus, Curianus, Naevianus, Iulianus, Manilianus (from Cornelius, Curious etc.) a.o. Subsequently, -ianus was independently tacked on to other proper names, as in Catonianus, Caesarianus, Ciceronianus, Neronianus, Galbianus, Othonianus. The sf -anus has only occasional coinages of this type, derived from cognomina only, as Sullanus, Augustan us.

4.7.2. Originally, neither sf was used to denote appurtenance to or provenance from countries. Africanus from Africa is perhaps the first word which breaks this rule. In Classical Latin it is not, however, used to denote the inhabitant of Africa (in this case Afer is used). Formed on the same type or after Gr Asianós (Thucydides) is Asianus. Words such as Germani, Aquitani, Hispani, Lusitani, Sicani (denoting peoples) may have helped to strengthen the sf, though -ani here is not derived from -a. Furthermore, -anus had in many words come to replace original -us or had obtained a place beside it: Africanus/Africanus, Gallicus/Gallicanus, rusticus/rusticus, praetorius/praetorianus, Olympius/Olympianus LL. In LL and still more in ML, -anus, -ianus are used for derivation from names of countries and towns: Tuscanus LL, Etruscanus began to replace CL Tuscus, Etruscus. Where the stem ended in -i, the sf became -ianus, as in Italianus, Arabianus, Syrianus, Lydianus, Phrygianus / Parisianus, Remtianus. As names of countries in -ia are much more frequent than those in -a (owing to the afflux of Greek names in -ia), -ianus practically prevailed while words in -anus were rarer.

I have dwelt so long on Latin because Latin is the basis which we must know to understand the use of -an, -ian in English. It is the linguistic position of Medieval and Modern Latin that English takes up.

4.7.3. The sf -ian, as denoting a p. or th. belonging to a country, is found in derivatives from names of countries which in Medieval or Early Modern Latin ended in -ia. Thus Burgundian 1578 is derived from L Burgundia; E Burgundy is much newer (1672). It is necessary to stress the general fact as it explains the learned tinge inherent in words formed with this sf. In the ME period, some words came into the medium of French. In this case the earliest spelling is -ien which is the form of the OF sf: e.g. Persien, Sirien. These words were subsequently latinized into Persian resp. Syrian. Other ME
loans are Italian, Arabian. But the real inrush of -ian words begins with the 16th c. A few exs may suffice: Anglian, Austrian, Australian, Bohemian, Burgundian, Carinthian, Carpathian, Caledonian, Cilician, Dalmatian, Etruscan, Estonian, Iberian, Ionian, Lydian, Prussian, Russian, Scythian, Utopian.

4. 7. 4. Derivatives from latinized modern names are Aberdonian (Aberdeen), Wincastrian (Winchester), Oxonian, Etonian, Cantabrigian (Canterbury), Glasgowegian. Hence we have other derivatives from names for which no latinized basis exists, as Bostonian, Devonian, Bristolian. Such names sound learned, and ordinary names with the sf have the same tinge, which may make a writer use them for stylistic purposes. Vanity-Fairian, Pickwickian contain a shade of mock importance.

4. 7. 5. The line of the L type Cornelianus which has never been disrupted throughout the whole Latinity, has also been taken up in English. Even in Medieval Latin, derivatives of this type had an academic character owing to their use in scholarly language. English derivatives are 16th c. and later. Exs are Arian, Augustinian, Calvinian, Monarchian (heretics of the second and third centuries), Gregorian, Socinian, Aristotelian, Carolingian, Carlowingian, Merovingian. The word christian also is a latinization of earlier christen.

4. 7. 6. There are derivatives from English names with the same learned or academic character, many of them in -onian, as Baconian, Byronic, Addisonian, Miltonian, Johnsonian, Morrisonian, Tennysonian, Nelsonian, in imitation of these Gladstonian, Johnian / Shakespearian, Spenserian, Arnoldian, Falstaffian, Ruskinian, Wordsworthian, Spencerian, Jennerian, Salisburyan, Freudian, Einsteinian, Shavian (f. Shaw).

Non-English famous names also take -ian, under the influence of Neo-Latin (which is likewise responsible for the corresponding uses in French and German: F Racinian, Napoléonien, Hugolien etc. / G Fichtianer, Kantianer, Hegelianer, Wagnerianer etc.), Lamarckian, Kantian, Hegelian, Wagnerian, Freudian, Einsteinian etc. This use is not older than the 19th c. (as in German; French has some older coinages).

The derivatives are used both as adjs and sbs with the basic meaning '(one) pretending to or characterized by material or spiritual descent from . . . '.

4. 7. 7. English has extended the sf -ian to all Latin words denoting one belonging to a social class or order in old Rome. The tendency existed in OF, too, which formed patricien and plébéien (both 14th c.) from L patricius resp. plebeius. The semantic field of L -ianus had thus extended from local appurtenance to social appurtenance. In the same group belonged also chrétien and païen, though they had entered the group somewhat differently: the pagani were originally those who lived in the country as opposed to those inhabiting the cities and towns, i.e. the christiani (as christianism had first taken root in the cities). E patrician and plebeian are thus loans from French. Another loan is barbarian 1549 (== OF barbarien 'an inhabitant of the ‘country’ of Barbarie'). The group was added on to by equestrian 1656, proletarian 1658, pedarian 1753 (fr. L pedarius 'senator of an inferior grade'). Equestrian attracted pedestrian 1716, though formally only, as there was no such thing as an ‘ordo pedestrisc’ in Rome.
4.7.8. We have a parallel phenomenon with zoological terms. Sbs denoting a class or order in -a, -ia, -i, -ea form derivatives in -an, -ian, -ean which denote the individual specimen. Exs are acalephan, acanthocephalan / reptilian, mammalian / acanthopterygian / crustacean. The competition of -ian is visible in that there are also formations like ametabolian fr. ametabola. As notionally related we may here mention the word sesquipedalian (fr. L sesquipedalis) 1615 ‘p. or th. measuring a foot and a half in height or length’, formed as though there were a zoological class called the sesquipedalia.

4.7.9. -an is a much weaker sf than -ian. It is not used with English personal names. The only exception is Elizabethan 1817 which is obviously coined after Augustan 1704 H, itself fr. L Augustanus. The implication of ‘cultural classical standard’ was prob. the decisive semantic element for the coinage. Lutheran 1821 is prob. L Lutheranus, Mahometan 1529 repr. ML mahometanus. The more usual word today is Mohammedan 1681, partly from Mohammed, partly a transformation of Mahometan. Petrarchan 1827 exists beside Petrarchian.

4.7.10. Latin names in -aeus, -eus, -eus are adapted with the termination -aen, -en, -e: Manichean, Judaean, Linnaean (fr. L form Linnaeus, but also Linnean, fr. Linné direct), Epicurean, Thesean, European, Orphean, Morphean, Promethean, gigantean, Mediterranean. Pronunciation and stress are usually, but not consistently, determined by the Latin form. Irregular is Promethean (fr. L Promètheus). Morphean is coined after Orphean, a Latin originaldoes not seem to be recorded. Irregular is also antipodéan fr. antipodes.

Anglicizations are publican 1200 (= L publican) ‘tax-gatherer in Rome’ (the sense ‘keeper of a public house’, BE, is first quoted 1728) and Puritan 1572 (= NL puritanus, derived from puritas, perh. under the influence of Catharan or Lutheran).

4.7.11. Modern geographic names in -a frequently derive adjs in -an: American, Corsican, Korean, Bahaman, Jamaican, Guatemalan, Alaskan, Okinawan, Tacoman, Topekan. But usage is not quite settled as to -an and -ian. “The people of Alabama call themselves Alabamians, and those of Indiana call themselves Indiana, but in both States there are minorities which object to the redundant ‘i” (Me/AL4, 548), see also ‘Names for Citizens’, by G. R. Stewart, ASp 1934, p. 78). Arizona derives Arizonian, Canada Canadian (perh. = F Canadien).

Names in -o form derivatives in -oan, as Chicagoan, Elpasoan, but also in -onian, as Buffalonian, Torontoan. Many American names are of Romanic origin and therefore derive on a Romanic basis -o/-ian. Exs are Ontarian, Mexican, Puerto-Rican, San Franciscan, San Diegan, Sacramentoan, Palo Altan, Los Gatan, San Matean. Spanish-coined are Santa Cruzan, San Josean.

Derived from a consonantal stem is Tibetan.

4.7.12. In -ian words, the stress is on the syllable preceding -ian. In -an words, the stress is on the syllable which is accented in the simple word. Elizabéthan is derived from the Latin form Elizabêtha, on the analogy of Augustus/Augustan.
4.8.1. -ance, -ence /əns/

is a sf with abstract deverbal sbs, meaning ‘act, fact of . . .’. Occasionally it overlaps with -ancy, -ency from which it is, however, functionally different.

E -ance comes from OF -ance which goes back to L -antia as well as -entia. In Medieval vernacular Latin, -antia had largely encroached upon the domain of -entia (as -ant had to a great extent ousted -ent), and in OF, the prevailing form is -ance in popular parlance1. ‘The generalization of -ance at the expense of -ence occurred in the ninth and tenth centuries’ (Malkiel, p. 58). Words borrowed from OF (I quote in OF spelling) are acceptance, aggraviance, accordance, allowance, anuiance, aquittance, attendance, avertance, continuance, discontinuance, desacordance, destorbance, desistance, encombrance, endurance, inheritance, entrance, gouvrance, grevance, performance, quitance, resemblance, remembrance, repentance, severance, variance which could be connected with verbs2. The ME spelling was usually -aunce which was later altered to -ance. After 1500, the spelling was often adjusted to the Latin conjugation of the verb. There is, however, much inconsistency (e.g. resistance, desistance which should have -ence etymologically).

4.8.2. The sf quickly gained a footing in English. As early as the 15th c. we find derivatives from native verbs, as utterance 1436, hindrance 1436 (which was perh. prompted by resistance 1417 and which attracted, as its counterpart, the word) furtherance 1440. Verbs of Romance origin have, however, in the main been favored, such as conveyance, joyance (chiefly poet.), permittance, procureance, dependance, consistence, guidance, clearance, admittance, urgence, pursuance (16th c.), emergence, aberrance, abhorrence, compliance (17th c.), interference, convergence, remittance (18th c.), deterrence, impedance, resurgance, issuance AE (19th c.). From native verbs are derived (besides the two quoted above) riddance 1535, forbearance 1576, forbiddance 1608, abidance 1647, bearance 1725.

Assistance, existence, perseverance (all ME) are older than the vbs belonging to them, but are now apprehended as derived from the vbs. On the other hand, the loans deference, reverence, inference, preference have not been actualized, as the difference in pronunciation shows from the corresponding verbs. Appearance is an E derivative for the speaker now, though the word was introduced as a loan (ME aparauance was refashioned after the verb appear).

The sf has formed several terms of electrical engineering, coined after the pattern of resistance, as reactance 1856, impedance 1886, inductance 1888. The word capacitance 1916, however, is no deverbal derivative but a blend of capacity and reactance.

4.8.3. In some cases, there is no English verb, but an adj in -ant, -ent with which the sb in -ancy, -ence thus comes to be derivationally connected, denot-


ing action or practice of the (non-existent) vb underlying the adj. This derivational connection is due to the co-existence of -ance, -ence and -ancy, -ency and the implied contrast of action and quality or property. I have treated the subject under -ancy, -ency and will therefore give here a few instances only of such sbs as have no Latin or French original: *iteration* ‘iteration, repetition’ 1604 is ‘deverally’ connected with *iterant* 1626, *conversance* 1609 with *conversant* 1340 in sense ‘practice of being conversant’, *dominant* 1819 with *dominant* 1532, *senescence* 1695 with *senescent* 1656, *sentience* 1839 with *sentient* 1603.

4.8.4. The sf is chiefly used with durative verbs. This distinguishes it from -al which is tacked on to vb's implying a final aim. Occasionally we find rival pairs such as *acquittance/acquittal, pursuance/pursual, abidance/abidal, resistance/obs. resistal, forbiddance/forbiddal, guidance/obs. guidage, continuance/continuation.*

The stress remains on the syllable which is accentuated in the simple word. With a very few exceptions (continue, encumber, issue) the deriving verbs are end-stressed.

4.9.1. -ancy, -ency /'an/si/

forms abstract sbs from sbs and adjs in -ant, -ent with the meaning ‘tendency to, state or quality of being . . .’. It arose under the influence of words in -acy which went with sbs and adjs in -ate (see 4.3). The equation is thus -ant:-ancy = -ate:-acy. The earliest instances occur in the 14th c., but the type is not really common before the 16th c. Early exs are *sergeancy* 1330 (cp. also A.F. sergeancie against OF sergeantie ‘sergeanty’), *inocency* 1357, *excellency* 1400, *inobediency* 1432 (—1634, obs.), *sufficiency* 1495, *insolency* 1494. The corresponding adjs are all older. Later are recorded *decency, indecency, pertinency, relevancy, efficiency, concurrency, consistency, permanency, vacancy, pertinency, fragrancy, petulancy* (16th c.), *compliancy, stagnancy, pendency, militancy, vagrancy, fluency, deficiency, insolveny, complacency, malignancy, agency, pruency, redundancy, tendency* (17th c.), *repellant, pliancy, truancy, opponency, leniency, flippancy, ascendancy* (18th c.), *insistency, constitution, lambency, stringency, trenchancy, insomnolency* (rare), *iterancy* (19th c).

4.9.2. As words in -ant, -ent represent L words in -ans, -ens which were accompanied by abstract sbs in -antia, -entia, E -ancy, -ency indirectly came to be the equivalent of these. As, at the same time, L sbs in -antia, -entia were represented by sbs in -ance, -ence (through the medium of French, see sf -ance, -ence), there developed a certain competition between -ance, -ence and -ancy, -ency which has often led to doublets. The sense differentiation has, however, in the main kept to the original principle of coining which is that sbs in -ance, -ence are deverbal nouns, expressing the idea of action, whereas sbs in -ancy, -ency are deadjectival nouns expressing the idea of state or quality: *inherence* 1577 belongs to *inhere* 1586, *inherency* 1601 to *inherent* 1578, *insistence* 1611 to *insist* 1586 H, *insistency* 1859 to *insistent* 1624, *compliance* 1641 to *comply* 1602, *compliancy* 1643 to *compliant* 1642, *tendency* 1628 to (formerly common) *tendent* 1340.

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IV. Suffixation

4.9.3. In cases where the idea of action was predominant, the form in -ance, -ence prevailed, even if no English verb existed and an adj in -ant, -ent was in use. In cases where -ance, -ence directly renders a Latin or French original the situation is normal, as the sf is also the adapting termination for L -antia, -entia and F -ance, -ence. But the tendency is also observed where no such original ever existed (see -ance, -ence): fragrancy 1667 (L) has proved stronger than fragrancy 1578, intelligence ME stronger than intelligency 1598, observance ME (L, F) stronger than observancy 1567, persistence 1546 (F) stronger than persistency 1597, refluence 1592 (no French or Latin) stronger than refluency, sentience 1839 (no French or Latin) stronger than sentiency 1850.

4.9.4. When the idea of property or quality is predominant, -ancy, -ency is occasionally preferred with loans also: pudency 1611 renders LL prudentia, no *pudence appears to have been recorded; there are also recumbency 1642 (adj 1705) and concomitancy 1563 (adj 1605). But these cases are rare. As a rule, -ancy, -ency is only used as a formative to derive sbs from adj. Unlike -ance, -ence, it has not become established as an adapting termination for loans in L -antia, -entia or F -ance, -ence.

4.9.5. In a number of cases, the form in -ance, -ence has prevailed without any apparent reason. Examples are difference 1340, innocence 1340, indulgence ME (-cy 1547), absence 1374 (the -cy forms are obs. now), importance 1508, eminence 1597, reluctance 1641 (-cy 1621), luxuriance 1728 (perh. infl. by exuberance). Patience and impatience (both 1225) have never been seriously rivaled by late patience 1697 and impatience 1526. Sometimes phonetic reasons seem to have played a role. Words in -lency are more usual than their counterparts in -lence. Exs are petulance, redolence, insolence, succulence, turbulence, malevolence, violence, virulence. The same applies to words in -escence as evanescence (no -cy), obmutescence (no -cy), obsolescence (no -cy), turgescence (-cy less used). Elegancy 1676, however, could not oust elegance 1510 as it was the French word for a thing that was considered French.

4.9.6. The forms in -ce have usually proved weaker than or have been ousted by the forms in -cy when the adj in -ant, -ent existed, but a verb was either lacking or felt to be unconnected for phonetic reasons. Exs are complacence, concomitance, lenience, the obs. words efficience, decence, indecence, fluence, constance, sufficiency, malignance.

The normal development in case of ‘doublets’ is either elimination of one of the forms (as seen in preceding paragraphs) or sense differentiation. Insignificance and insignificancy denote almost the same, but insignificancy may signify a p. or th., a sense which insignificance has not. Dependence is only abstract, dependency has a concrete meaning, too. Emergence is the deverbal abstract sb, emergency means ‘unforeseen combination of circumstances’.

A few words in -cy have developed a concrete sense, as vacancy, dependency, inhabitancy, constituency. There are a few derivatives from sbs, as occupancy, tenancy, constituency.

The stress remains on the syllable which is accented in the simple word.
4. 10. 1. -ant, -ent /ənt/

has formed quite a number of words in English, chiefly on a Latin basis of coining. These words are agent-nouns, ultimately going back to Latin participles in -antem, -entem used as substantives. The earliest words recorded are loans from French, chiefly legal terms such as tenant 1325, defendant 1400, accountant 1453, inhabitant 1467, appellant 1480, complainant 1495. A number of them were analysable as English derivatives, being accompanied by verbs (the vb appeal was formerly spelt appel, so appellant was a derivative from it for the speaker). Servant 1225 was felt to be connected with serve 1225; and there are a few more words of the same category, as attendant 1555 H, dependant 1588 (either an Ec after prec., or F dépendant). To this group also belongs the word adherent 1460 H which is F adhérent from which adhere 1597 H was later back-derived.

4. 10. 2. On the other hand, -ant, -ent rendered the Latin participial ending -ans, -ens, and participles were frequently used as agent-nouns in Medieval Latin (which accounts for the French usage illustrated above). Latin-coined are resident 1487 (but F résident is recorded in the 13th c.), respondent 1528, opponent 1588, participant 1562, occupant 1596 (also in F), decedent 1599, visitant 1599, disputant 1612, administrant 1602, contestant 1665, attestant 1880, applicant 19th c. Inhabitant 1462 is either L inhabitants or F in-, inhabitant, but deforciant 1585 shows the Latin form against Anglo-French deforcant. A few other words are litigant 1638 (L, F), informant 1693 H, affirmand 1747, aspirant 1739, postulant 1759 (L, F).

4. 10. 3. The preceding words are either outspoken legal terms or carry the stamp of formal procedure. Several of them are analysable as English verbs plus the sf -ant, -ent. But only in a very few cases has this led to coinages from an English word (we might, however, consider informant, affirmand, contestant, attestant and some others formed in this way; the word aspirant is sometimes pronounced [əs'pærənt], in AE chiefly so): claimant 1747 is ‘one who claims’; it may also be analysed as ‘one who holds a claim’ which seems to have led to annuitant ‘one who holds an annuity’ (the word is quoted earlier (1720) than claimant, though) which was followed by chargeant ‘one who has a charge upon an estate’ 1887 (app. Scotch only).

Consultant ‘consulting physician, lawyer, engineer (etc.) who advises’ (the OED has only the meaning ‘consulting physician’; the verb consult in back-derived sense ‘give advice’ is not recorded either, but the verb is used so in AE) renders F consultant ‘giving counsel’.

4. 10. 4. Modern Latin uses participles in -ans, -ens to denote the impersonal agent, chiefly in the terminology of medicine (as in stimulans ‘a stimulant’), English (as well as French) has made extensive use of this type in medicine, chemistry, physics and in the commercial jargon connected with them. Exs, partly now on a native basis of coining, are illuminant 1644, solvent 1671, deobstruent 1691, absorbent 1718, evacuant 1730, stimulant 1728, saturant 1775, propellant 1814, irritant 1802, lubricant 1828, deodorant 1839, repellent, refrigerant, contaminant, denaturant, digestant, depressant, disinfectant, anaesthetic, even coolant.
4.11.1. -ard /ɔ(r)d/

came into English through loans from French such as bastard, coward, buzzard, all of them depreciative terms (the buzzard was a ‘useless’ kind of hawk, and the English word acquired the sense ‘worthless, stupid, ignorant person’ which is now dialectal). By the side of bastard there existed the word bast (now obs.) with the same meaning. This co-existence of two synonymous words may have favored the rise of similar pairs: shrew/obs. shreward 1297—1338 ‘scoundrel’, dull/dullard, dote/dotard 1386, slug/sluggard 1398, wise/wizard 1440, drunk/drunkard 1530. Niggard ME is not clear, dastard 1440 is prob. a blend of damned and bastard. As dull, dote, slug were vbs also, deverbal derivatives could be formed, such as blinkard ‘one who lacks mental perception’ 1510, stinkard 1600, bragart 1577, laggard 1702. No words appear to have been coined since about 1700. Communard 1874, dreyfusard 1882, dynami- tard 1882 are loans from French.

4.11.2. Lollard 1390 is generally supposed to represent MDu lollaerd, but as -ard was much in favor in ME, it is quite possible that it is an Ec, refashioning older lollere.

The derogatory character of the sf refashioned a few other ME words, too, as jailer to jailard, holer ‘lecherous person’ to holard, trichour ‘traitor’ to trichard. In other cases, however, -ard is a substitute for other sfs without any apparent reason, as in ME hanszard fr. hanser ‘Hanseatic’, scholard fr. scholar.

4.11.3. Staggard ‘a stag in its fourth year’ 1400 shows an isolated use of the sf. In buzzard ‘beetle’ (about 1600) the sf is perh. merely a variant of -er, as in buzzer 1606 ‘insect that buzzes’. In blizzard 1834 the sf may likewise be a variant of (unrecorded) -er (the root is imitative).

Loans are words such as placard, standard, Spaniard, tabard (F), tankard (Du), unexplained are bollard 1844 (a nautical term, meaning ‘post for securing ropes to’), custard 1450. Steward is OE stig-ward.

Formerly, -ard was often spelled -art which has remained the established form with braggart.

4.12.1. -arian /ˈɛrən, ˈɛrən/

originated as a mere rendering of Latin words in -arius in the second half of the 16th c. The earliest example known to me is sacramentarian 1535 (Luthers’s term for Protestant theologians with certain ‘sacramental’ views). Another word is quinquagenarian ‘captain of fifty men’ (extended from quinquagenary 1382 — L quinquagenarius). The kind of extension is similar to that we have as far back as Late Latin in vicarianus fr. vicarius (op. OF primerain ‘first’ and Prov. primairen ‘situated in front’ — L primarianus fr. primarius). Sacramentarian was followed by disciplinarian 1585 ‘Puritan who favored the Presbyterian discipline’. After these, a large group of words from the ecclesiastical sphere were coined in the 17th c. and later, all with the meaning ‘member of a sect, holder of a tenet, doctrine or ecclesiastical principle’, as Trinitarian 1628, Unitarian 1657, Predestinarian 1638, Sublapsarian 1633, Supralapsarian
1633, Antilapsarian 1674, Sabbatarian 1613, sectarian 1649, Infralapsarian 1631, latitudinarian 'one who favors latitude in religious thought' 1662, adessenarian 1751, libertinarian 1789.

4.12.2. Non-religious principles are implied by Parliamentarian 1644 'one who took the side of P. in the Civil War', necessarian 1777 = necessitarian 1798 'a believer in necessity', humanitarian 1819, authoritarian 1879, egalitarian 1799 = egalitarian 1885, attitudinarian 1754, utilitarian 1781, societarian 1822, plaititudinarian 1854, brutalitarian 1904, totalitarian 1928, charitarian 1930 and others.

4.12.3. The principle of coining was orig. that of rendering L -arius by E -arian. Subsequently, however, -arian gained formative independence in that it was apprehended as a sf in its own right, being tacked on to the Latin stem. Once sacramentarian and others existed it did not matter whether there was a Latin original in -arius: sacrament-arian leads to Parliamentarian, establishmentarian. This explains veget-arian (formed like veget-able, veget-al, veget-ation, not 'irreg. f. vegetable' OED). The parallelism of trinity/trinitarian led to societarian, neutralitarian, authoritarian, totalitarian, charitarian etc. directly Derivation from an English word is exceptional: nothingarian 'one who holds no religious belief' 1789 is a serious term, also rare fruitarian 1893, but nutarian (q. Je VI. 21. 22) is a jocular coinage (after prec. and vegetarian). Packetarian 'one of the crew of a packet-boat' 1882 joins the 'group' words of the following paragraph.

4.12.4. Adaptations from Latin are also proletarian 1658, aularian 1695 (which acquired the particular meaning 'member of a hall at Oxford or Cambridge'), pedarian 'a senator in ancient Rome who had no vote of his own' 1753. The common denominator of these words was 'one belonging to a particular group', which may have helped to form septuagenarian 1715, sexagenarian 1738, nonagenarian 1804, octogenarian 1815, quadragenarian 1839, quinquagenarian 1843 H 'one of the group of those who are in their forties etc.' The unextended forms in -ary (not existing for 40 and 90?) are rare by-forms, though older than the extensions. Proletary is today only a term of Roman sociology.

In abecedarian 1603 (= ML -arius), atrabilarian 1678 (= atrabilarius ML) and valetudinarian (= valetudinarius LL) 1703, veterinarian 1646, agrarian 1618, antiquarian 1610, librarian 1670 -arian is prob. still merely adaptational for L -arius (abecedarian, antiquarian and librarian are possibly influenced by grammarian which is, however, OF gramarien. Vulgarian 1650 (the Latin is vulgaris, sb 1804) follows proletarian.

4.12.5. Before the 16th c. Latin words in -arius had been adapted with the termination -ary and occasionally continued to do so later, as veterinary 1790. But on the whole, the tendency is to reserve -arian for the formation of sbs; this is the rule for such as are coined with one of the meanings treated above. The words, like other sbs, can be used as adjects. Adjs adapted from Latin words in -arius are usually formed in -ary. There is a difference between vestiary 'relating to dress' 1622 and vestarian 'relating to ecclesiastical vestments' 1850. Sectarian is used with reference to Christian sects, whereas the word sectarian is used with reference to Indian religions.
4. 13. -ary /ərɪ, ərɪ/  

is an adjectival sf with words of Latin origin. Latin adjs in -arius were adapted as pigmentary, elementary, dietary, stationary, tributary (all ME), testamentary 1456, disciplinary 1593. Since these words were analysable as English roots plus -ary, other words could easily be formed. Derivatives are phonetically characterized in that they end in -ary (chiefly -ionary), -tary (chiefly -mentary) and (less frequently) -vary. English coinages are found from the end of the 16th c. on, as cautionary 1597, complementary 1699, instrumentary (obs., 1564—1638), discretionary, fractionary, fragmentary, probationary, provisionary (now rare), reversionary, institutional, supplementary, traditional, textual, visionary (17th c.), convulsionary, complimentary, residuary, domiciliary, insurrectionary, revolutionary (18th c.), cavitory, segmentary, tegumentary, tunicular (anat.), societal, evolutionary, documentary, sedimentary, rudimentary (19th c.), inflationary 1920.

A number of words have more or less usual counterparts in -al (provisional, segmental, traditional, textual, visional, fractional, insurrectional a.o.). The difference is that the -al word merely means ‘pertaining to, connected with . . .’ whereas the -ary word connotes the idea of tendency or purpose. Fractional means ‘of the nature of a fraction’, fractionary ‘tending to divide into fraction’, insurrectional ‘pertaining to insurrection’, insurrectionary ‘addicted to insurrection’.

The sf involves no shift of stress except with derivatives from trisyllabic or longer sbs in -ment. Here the stress pattern is that of élément/élementary, développement/developmentary.

4. 14. -ate /æt, et/ (type consulate)  

is ultimately L -atus, a denomin sf meaning ‘office, function, institution of . . .’, as found in AL consulatus, magistratus, tribunatus, triumviratus, EL apostolatus, cardinalatus, episcopatus, pontificatus, patriarchatus, prioratus, pastoratus, diaconatus, ML baccalaureatus, comitatus, ducatus, electoratus ‘dignity of a German Elector’, caliphatus, landgraviatu a.o. With the exception of a few words such as consulate 1387, priorate 1400 English words are 16th c. and later: tribunate 1546, triumvirate 1584, marquisate 15 . . . (= F marquisat 1507), pontificatu 1581, noviciatu 1600 (L), vicariate 1610 (L), patriarchate 1617, baccalaureate 1625, episcopate 1641, generaleate 1644, cardinalate 1645, syndicate 1624 in sense ‘office of a syndic’, electorate 1675, professorate 1860, pastorate 1795, aldermanate 1875, all with the meaning ‘office, dignity, institution’.

The sense ‘period of office’ is implied in Protectorate ‘the P. of the Cromwells’, Consulate ‘Napoleon’s C.’, but is, in principle, possible with other words, too.

Triumvirate ‘association of three rulers’ attracted syndicate ‘body of syndics’ 1624 H. In the 19th c. this semantic branch of the sf was further developed: tribunate ‘the French legislative body 1800—1807’, episcopate 1842 H, directorate 1837, syndicate ‘combination of persons for the promotion of an enterprise’ 1865 H, electorate 1879 H, professorate 1860 = professoriate 1858.

The sense of ‘dominion, territory’ (which was strong in ML: ducatus, comitatus etc.) is weak in English. Exs are caliphat 1614 and more recent words coined after it, as khanate 1799, sultanate 1879, imamate 1727, emirate 1863,
though the chief sense is that of 'dignity, institution' which is the only one possible with khedivate, khediviate 1880 (as khedive was a title only).

Though words in -ate are originally mere renderings of Latin words in -atus, -ate is now to be regarded as an English sf (wfnb). For 19th c. coinages, at least, a Latin original need no longer be assumed, though it may exist (as ML aldermannatus which the OED gives as the etymology for aldermanate; but aldermanate is obviously coined after older words of the same kind, without regard to the ML word).

4.15. -ate /it/ (type passionate)

After the pattern of proportion 1398 (= LL proportionatus), passionate 1450 (= ML passionatus), derivatively connected with portion, passion, a few other adjs have been formed with the sf -ate, as affectionate 1494, orig. also 'full of passion' (f. affection in the now obsolete sense 'passion', rather than "adaptation of Fr. affectionné" OED), compassionate 1587, dispassionate 1594, obs. opinionate 1553—1661, extortionate 1789, notionate 1859 'full of notions, headstrong' Sc. and AE (it will be noted that all the words end in [ʃənt]).

Companionate 1927, as in companionate marriage, is perhaps orig. a sb. Cp. the sentence "birth control has brought the companionate into existence" (q. OED Spl. s.v. companionate). It has, at any rate, nothing to do with obs. adj companionate 1657.

4.16. -ate /ct/ (type acetate)

The sf -ate derives chemical terms on a NL basis of coining, chiefly names of the salts and esters formed from those acids whose names end in -ic, as acet-ate 'a salt or ester of acet-ic acid'. Exs are caprate, citrate, crenate, cyanate, ilicate, iodate, lactate, lithate, nitrate. English coinings are not older than the last decade of the 18th c. Historically, the sf is again the anglicized Latin ptc -atus, originating in obs such as plumbum acetatum 'acetated lead, lead treated with vinegar', by way of clipping acetatum (as a primary).

4.17. 1. -ate /ct/ (type translate)

is an adapting termination with verbs, chiefly used to anglicize Latin verbs in -are. Latin second ptc$s in -atus were adapted in Middle English long before any other verb forms came into use. From about 1300 we find forms such as translate, create, ordinate to render L translatus, creatus, ordinatus. The adoption of French ptc$s had preceded (depeint, deskumfit 1225). The latest treatment of the subject is that by Ole Reuter: On the Development of English Verbs from Latin and French Past Participles, Helsingfors 1934, Societas Scientiarum Fennica, Commentationes Humanarum Litterarum VI. 6 on which the following is chiefly based, though I differ in the interpretation of Reuter's material.

4.17.2. In the process of derivation from French and Latin ptc$s three tendencies were at work: the first was to reconcile the function of those loans with the form prevalent with native words of the same function. The English
'morpheme' for second ptcs (in the majority of cases, i.e. with 'regular' verbs) was -ed, so this ending was early added to such borrowed ptcs, as in circumcised 1250, painted, concluded 1300, professed 1315, desolated 1382, incorporated 1398 a.o. The corresponding present stems naturally came to end in -t resp. -ate. On the other hand, the final t of the foreign ptcs was also apprehended as characteristic of the second ptc and the preterite. Reuter cites present tenses such as compact, corrupe, rap, redemp, from compact, corrup, rap, redempt. But this analysis cannot have represented the general tendency as this kind of back-derivation would not have led to -ate, but to [c]. The third tendency was that which derived on the analogy of certain native verbs. There was a group of native verbs whose ptcs ended in -t, too, and which were homophonous with the present and infinitive stem, as cut, burst, let, put, set, shut, slit, split. This parallelism had far-reaching results. On the analogy of native verbs where present, preterite and second ptc had one form, verbs of foreign provenance were treated in the same way, so we find anoint, discomfit etc. as present, imperative or infinitive forms. Ole Reuter's book shows that this derivational pattern was prevalent from about 1225 to 1475. It is only toward the end of the 15th c. that the victory of -ed ptcs, i.e. derivation following tendency 1), is definite. Ptc of French and Latin origin with a final t were used as ptcs and even preterites in English without the addition of -ed. "Exactly as we have the infinitives cut, split, etc. corresponding to the past participles cut, split, etc., I think such infinitives as discomfit, attain, convict, direct have been formed on the past participles discomfit, attain, convict, direct" (Reuter 132).

4. 17. 3. Almost all the facts are in favor of Reuter's theory: most of the recorded ptcs occur earlier than the corresponding infinitives, most of them occur unextended, and many are also used as preterites (see Reuter 71 and 132—134). There is, however, one difficulty which does not seem to have occurred to Reuter. If his theory is right, it is difficult to understand what caused this derivational process which was prevalent for about 250 years to give way to the type illustrated by tendency 1). If up to 1475 ptcs were converted into present and infinitive stems, we hardly understand why ptcs and preterites were so suddenly formed with the ending -ed. Reuter does not enlighten us on the subject. He only says that "in the long run, however, they were not put on the same footing as the short native verbs cut, hit, set, etc., but conformed to the majority of English verbs, and -ed began therefore gradually to be regularly added in the past tense and the last participle" (127—128). In Caxton's works the balance is already clearly in favor of -ed (see Reuter 86—87 and 128—129). That the influence of cut verbs has played a part cannot be denied as many -t ptcs were used as preterites. But the number of such unextended preterites is incomparably smaller than that of the forms used as ptcs. This seems to weaken the theory of parallelism as the analogy of cut verbs should equally have worked for the preterite.

4. 17. 4. Reuter overstates the case of unextended non -t ptcs: they are not as frequent as unextended ptcs in -t, though there are quite a number of them. Gower, for instance, has 9 unextended -s ptcs against 2 with the ending -ed.
Several other cases of extended -s ptc's are explained by the fact that the full verb is derived from a French verb in -s: F annexe, compresser, empresse, fixer, opposer, disperser naturally came to end in -s in English, so ptc's ended in -ed. They are not necessarily derived from annexus, compressus, impressus, fixus, oppositus, dispersus. Reuter himself admits that the French verbs have probably played a part (136). It is perhaps not wrong to assume that the use of foreign -t ptc's without the ending -ed was a literary tendency with certain writers rather than a reflection of common usage. Most of the documents Reuter has studied have a learned character or are translations. The tendency which is not reflected in the documents, was probably from the beginning to add -ed (i.e. tendency 1). The existence of early extensions is borne out by Reuter's material (see above), but somehow the connection with the later development is lacking in Reuters' book, as he is mainly interested in unextended foreign ptc's used as infinitives and present tenses.

4. 17. 5. There is another factor that has probably played a greater part than Reuter seems ready to admit, though he does not overlook the factor (136). The existence of deverbal sbs in -tion, -ation seems to me to be a more important factor than is generally recognized. For recent times the process of back-derivation is generally admitted (see below). Why should not the same kind of derivation, at least as a helping factor, be assumed for the early stages, too? Latin deverbal sbs in -atio were anglicized as ending in -acy, -ation, pronounced [atasion], so there is no phonetic difficulty. We have an almost exact parallel in the pairs -ate/-acy, -ant/-ancy (see sfs -acy, -ancy). A great number of Reuter's earliest exs of -ate verbs are accompanied by older sbs in -ation, and the coiner of the verb, who knew Latin well, surely had the Latin sb in mind (many of the 14th c. works are translations from Latin), even if this had not been anglicized.

4. 17. 6. The earliest instance of a full verb in -ate appears to be consecrate 1387, followed a little later by sophisticate and prostrate 1400; (note that the Latin infinitive to prostratus is prosternere). Many appear in the 15th c., as abbreviate, allege, alleviate, approbate, create, contaminate, connotate, dedicate, determinate, deflorate, desolate, equate, frustrate, inoculate, incorporate, mitigate, ornate, preparate, provoke, recreate, separate, terminate, transfigurate a.o. (see Reuter).

4. 17. 7. While in the earlier stages the ptc is usually recorded before other verb forms, more than 47 per cent of all new verbs coined in the 16th c. appear in the present from the beginning (Reuter 106/107). This means that -ate verbs are no longer back-derivations from ptc's, but -ate has become an established formative in its own right. The 16th c. and still more the first half of the 17th c. were very productive, but many formations are dictionary or nonce words (op. Reuter's lists 93—106 and 112—121). Word-coining in the second half of the 17th c. and in the 18th c. was, as is to be observed with English wf in general in those periods, rather unproductive, but the 19th c. has coined many scientific or technical words, as causate, cremate, exsanguinate, mutate a.o. (see Reuter 124—125), sometimes wrongly adapting, as micturate 1842 f. L micturire.
4.17. 8. -ate lost its original character as early as the 16th c. and began to be used freely as a sf to derive verbs from Latin nominal stems, when no Latin verb existed. After felicitate (which was backed by L felicicare and felicitas) were formed other vbs, such as facilitate, capacitate, debilitate, obs. fertilitate, facultate, connubiate, foliate, paginate for which the possible existence of a Latin verb sufficed. This process is common today in scientific terminology where we use words such as chloridate, glycerinate, chlorinate, benzoinate, 'combine, impregnate, treat with ...', many with the prf de-, as decapsulate, decandurate, defibrinate, dehydrate, delaminate, denitrate etc. Non-scientific are orchestrate, hyphenate AE, freely derived from sbs. The sf here has a mere functional value (as do often L -are, F -er, G -ieren). In some cases a word may render a French word in -er, as assassinate, isolate, ameliorate, diagnosticate, marinate, orientate, vaccinate. Back-derived from sbs are cavitate, cerebrate, co-educate, commentate, demarcate, orate (in recent American English 'speak like an orator'), reparate, valuate, legislate a.o. Derivation from non-Latin or non-Romance sbs is exceptional. Phonate 1876 is isolated.

4.17. 9. The adaptational use of -ate came too late to out such Latin -are verbs as had been introduced before -ate became established as a format. As Latin verbs in -ificare had fallen together with -ify, -ify loans from French, this group has always regularly been adapted in -ify. Latin verbs in -isare likewise came into English through the medium of French and had by the 14th c. become established as -ize verbs in English. Occasional -ate verbs are baptize, inthronizate, martirizate, pulverizate, deificate, diversificate, edificare, sanctificare, vitrificare, vivificare, coined before 1500 and obs. now. Rare modern words are nidificare 1816, specifical 1620, stabilizate 1909.

Owing to its learned tinge, the sf has been used in facetious slang words, as bibulate 'drink', quitate 'leave college before graduation', absquatulate 'decamp'; discombobulate 'discomfit', titivate, earlier tiddivate, spifficate 'treat roughly' a.o., many of them not clearly etymologizable.


4.17. 10. Words of two syllables whose first syllable is long (through vowel) or closed (through consonant) tend to be stressed on the first syllable (frustrate, stagnate, ornate). The tendency is especially strong in AE where the vowels of the first syllable are often changed as against BE usage so as to make the stress possible (cremante with [i], rotate, locate with [o], orate with [a], vacate with [e]). If the vowel of the first syllable is short, the last syllable is stressed (create, narrate, rotate BE, locate BE). In words of more than two syllables the stress is now predominantly on the third from the end (formerly démonstrate, compénsate, condénsate; still common or heard are confiscate, demarcate, défácte, illustrarte, while remónstrate is never stressed on the first) unless they are derived on a native basis (glycerin-ate, benzoin-ate a.o.) or analysed as derivationally connected with other words (stabilizate fr. stabilize, orientate fr. orient).
4. 18. 1. -átion /ˈeɪʃən/

anglicizes L *-atio* as well as (learned) F *-ation*, but is now largely an independent sf with impersonal deverbal sbs. How far the English words are influenced by French patterns is often difficult to tell, as most of the words exist both in Latin and French. In some cases we can check the origin. *Exportation* of which the OED says that it is ‘ad. French’ is certainly not French as the French word is first recorded in 1734 whereas the English word is dated back to 1610. The pattern is either L *exportatio*, or *exportation* is an English derivative.

Formally we can distinguish four groups: 1) sbs which go with verbs in *-ify*; 2) sbs which go with verbs in *-ize*; 3) sbs which go with verbs in *-ate*; 4) sbs which are accompanied by an unsuffixed verb.

4. 18. 2. In the 14th c., English adopted Old French word pairs such as *edify/edification, justify/justification, purify/purification*. On the pattern of these pairs English derived sbs from older *-ify* verbs. The derivational character of the English sbs is not impaired by the fact that almost every word has a Latin or French counterpart as well. Exs are *certification, glorification, ratification, rectification, pacification* (15th c.), *amplification, modification, sanctification, verification* (16th c.), *identification, magnification, vilitation* (17th c.). Outside this group of learned words is *jollification* 1798 for which there is, of course, no Latin pattern. Other colloquial verbs (*argufy* etc., see *-ify* sf) have not, however, developed sbs in *-ification*. The phonological opposition is [if eiʃ‘eʃən].

4. 18. 3. On the analogy of *organize/organization, canonize/canonization, martyrize/martyrization, moralize/moralization* (15th c. and older) the language formed sbs from *-ize* verbs, apparently beginning with the 17th c. It is possible that Neo-Latin influence has also played a part, but French seems excluded, as many words have apparently never existed in French (if their absence in *Littré, Dictionnaire Général, FEW* is to be interpreted in this way), such as *formalization, familiarization, bastardization* a.o., or are recorded later than their English counterparts (*catechization* 16., *F 1787 FEW, colonization 1770, F 1800, civilization 1704, F 1766*). We may therefore assume that sbs in *-ization* are derivatives from *-ize* verbs from about 1600 on. Exs are *authorization, catechization, evangelization, pulverization, formalization* (17th c.), *colonization, temporization, civilization, brutalization, familiarization, humanization* (18th c.), *centralization, atomization, Christianization, bastardization, fertilization, demonetization, Germanization, Anglicization, Latinization, fossilization, legalization, neutralization* (19th c.). The phonological opposition is [aiz/izeʃən] or [aiz/azeʃən]. The former is preferred in AE, the latter prevails in BE.

4. 18. 4. Sbs in *-ation* which go with verbs in *-ate*, are, as a rule, older than the verbs (see *-ate* sf). ME sbs in *-ation* are loans from French or Latin, as *altercation, creation, constipation, contemplation, expurgation, constellation, incarnation, moderation, modulation, translation* (before 1400), *accumulation, intimidation, situation* (15th c.). Later words also have French patterns, as *education 1531, saturation 1554, alternation 1611, intimidation 1658, consterna-

[4.17.8.—4.18.4.] -ate (type translate), -ation 203
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4. 18. 5. Exs of group 4) are damnation, restoration, accusation, commentation, taxation, temptation, vexation, information (ME), loans from Latin or French. The corresponding verbs are also loans, representing OF verbs in -er. Later loans are alteration 1482, defraudation 1502, relaxation 1526, derivation 1530, affectation 1548, affirmation 1533, quotation 1532 a.o. All these were accompanied by older unsuffixed verbal loans, and -ation sbs came to be apprehended as direct derivations from them.

A few instances of PE verbs analysable after the pattern absent/a bsenta tion are adaptation, adjuration, administration, adoration, affectation, a forestation, alteration, annexation, assentation, augmentation, defraudation, deforestation, deformation, demarkation, deportation, destestation, disposition, expectation, exploration, exportation, exultation, forestation, reforestation, frequentation, vocation, vexation, visitation.

There are also some derivatives from native verbs, as flirtation 1718, starvation 1778, botheration 1801, the stock-exchange term back verdadation (after retardation). Jobation 1687 is no longer felt to be a derivative in the original sense, as the vb jobe is obsolete, but it may be connected with Job from which the vb was derived anyhow.

The sf is, however, used with a number of colloquial, jocular or vulgar words such as flust(e)ration, twitteration, worryation, darnation, murderation, splatteration, thunderation, furation (infl. by indignation), flinderation ‘state of being in finders or fragments’, fudgetation, quiration ‘inquire’, twistification ‘a country dance’ (see ADD), coined as mock-learned words. On the other hand, ridiculing criticism of the growing use of the learned sf is old as a quotation from the 17th c. in the OED (s.v. -ation) shows: “But what languages do they speak, servant? — Several languages, as Cavation, Chirpation, Hootation, Whistleation, Crowation, Cackleation, Shriekation, Hissation.”

4. 18. 6. As -ation is a deverbal sf, there is usually a verb which goes with the sb. Occasionally, however, -ation is a sf in its own right, deriving a sb from a virtual verb. Exs are sanitation 1848 (the vb sanitate is back-derived from it, first rec. 1882), sedimentation ‘deposition of a sediment’ 1874 (app. no vb recorded).

As for the meaning, -ation falls into the group of impersonal deverbal sbs with their various semantic possibilities (see esp. -ment sf). Sbs in -ation do not, however, denote concrete things.

4. 19. -by /bɪ/ has formed a few new archaic or obsolete words denoting persons, originally coined as words with a zero determinatum, ‘man from’ Littleby’, then re-interpreted as consisting of the determinant little and the determinatum -by. The sf originally forms place names, as Whitby, Grimsby, Littleby etc., and after place names used as surnames were coined such words as obs. suresby, sureby ‘p. that may be depended upon’ (1553—1675), rudesby (now arch.) ‘insolent fellow’ 1566, sneaksby (now rare) ‘mean fellow’ 1580, obs. idleby, idlesby ‘idle fellow, loafer’ 1589, wigsby ‘p. wearing a wig’ (joc.) 1755. Cop. -ton sf.
4. 20.  -cy /si/

On the analogy of the phonetically related alternation -ate/-acy (4. 3) and -ant/-ancy (4. 9) the language has formed a few sfs with the sf -cy (in -cy, -ncy, -tacy only). Like -ancy and -acy from which -cy has resulted in a somewhat irregular way, -cy denotes state or position, particularly a position connected with certain privileges or a fixed revenue. No coinages appear to have been made before 1700. From the 18th c. are chaplaincy 1745, cornetcy 1761, ensigncy 1767, colonelcy 1797. Later are baronetcy 1812, captaincy 1818, chieftaincy 1817, generalcy 1864, brevetcy 1846, aldermancy (rare, no date in OED).

With the meaning ‘state’, but without the nuance underlying the preceding group, are formed bankruptcy 1700 (after insolvency; some speakers do not pronounce the final -t of bankrupt in bankruptcy, but the phonetic pattern has not extended to other derivatives from a root in -t as cornetcy and baronetcy show) and the word normalcy 1857, chiefly AE.

4. 21. 1.  -dom /dom/

is a sf which has congeners in all Germanic languages except Gothic. In OE it still exists as a substantive (dōm) with the meaning ‘jurisdiction, state, statute’, the same as we have in PE doomsday. In OE it formed cpds with adjectival first-words, such as frēōdōm, wīsdōm, hāligdōm ‘relic’. The type was weak, and as far back as OE composition with substantival first-words is the prevalent type of derivation.

4. 21. 2.  From OE are recorded such words as łōwdōm ‘serfdom’, dryhtendōm, campdōm / alderdōm, bishopdom, Christendom, earldom, heathendom (according to OED revived about 1700 as the opposite of Christendom), kingdōm, martyrdom, masterdōm, popedom which in OE had only the meaning ‘state, dignity, jurisdiction, authority of . . .’. ME are dukedom, sherifdōm, thraldōm, whoredom. From the 16th c. are recorded archdukedōm, heirdōm, patriarchdōm, priestdōm, princedōm, from the 17th c. birthdōm, motherdōm, queendom, peerdōm, squiredom, mayordom, peopledom, churchdōm, cuckoldom, devildom, from the 18th c. we have awaredom, puzzledom, sachiemdom ‘position of a sachiem’.

4. 21. 3.  In ME the sf developed the sense ‘territory’ with a few words, as Christendom, dukedom, earldom, kingdom. The meaning ‘collectivity of . . .’ is also ME. By 1800 the sf had acquired the additional tinge of depreciation, satire, mockery. This development had probably started with the word whoredom which, as a biblical word (Hosea I. 2), could not fail to play an important role in the sense-development of the sf. Words coined before 1800 with a depreciative tinge are cuckoldom, devildom, thraldōm. On the other hand, we have such words as earldom, dukedom, peerdom, princedom which conveyed the idea of high standard and titular pretense.

4. 21. 4.  The sf is now very productive, though most of the words are slightly humorous and not exactly recognized as standard vocabulary. This productivity is the result of a revival. Carlyle, inspired by German words in -tum, has
played a great part in promoting the sf. He coined such words as duncedom, philosophedom, rascaldom, Saxondom, scoundrelodom, tinkerdom. Other writers followed.

In principle, the sf has preserved the old senses ‘status, realm, collectivity’, if somewhat changed. The neutral shade of ‘status’ is no longer the leading one. Most words coined on this semantic basis imply disparaging criticism. Carlyle’s duncedom, rascaldom, scoundrelodom have a pronounced pejorative character. Other deprecative coinages of the early 19th c. are cockneydom, noodledom, savagedom, thudodom. Later are such words as attorneydom, bourgeoisdom, bumbledom, bunkdom, brutedom, caucusdom, cliquedom, corpsedom, crookdom, curdom, dandydom, flapperdom, fogeydom, gangdom, gangsterdom, loaferdom, nazidom, pariahdom, pauperdom, ruffiandom, sovietdom, suckerdom.

4.21.5. The neutral shade ‘status, condition’ is contained in such words as caesardom 1861, czardom 1841, monkdom 1862, pagedom 1852, rebeldom 1859 (Thackeray), savindom 1842, sheikhdom 1845, tinkerdom 1834 (Carlyle), stardom 1865 (frequent since about 1915), authordom, bachelordom, wifedom and perhaps others.

4.21.6. The literal meaning ‘territory, domain, region’ occurs with such words as czardom 1841, Gaeldom 1860, jarldom 1820, mormondom 1886 H, negrodom 1860, rebeldom 1862 (much used in the American Civil War), sheikhdom 1845. But the chief function of the sf in this sense group is to form words with the figurative meaning ‘land, world of . . .’, as boydom, butlerdom, crossword-puzzledom, dolldom, dreamdom, fairydom, fandom, flowerdom, gipsydom, ladydom, mammondom, oildom, schooldom, taxidom a.o. Such cbs may also denote the ‘inhabitants’ of this ‘land’ (esp. derivatives from personal cbs), characterizing them as a community, fraternity, a certain class with its ways: artistdom, beggardedom, negrodom, parsondom, professordom, scholardom, spinsterdom, suelldom, teacerdom, yankeedom.

4.21.7. A sense variant of the preceding group is that of ‘group united by a common interest’, especially found with cbs belonging to certain semantic fields, as sports, movies, the theatre. The group is chiefly American English. Though there are a few coinages before 1900, as theatredom 1889, turfdom 1864, the type has grown strong in the last 30 years only. Exs are athleticdom, autodom, baseballdom, bookdom, fandom, filmdom, footballdom, fraternitydom, golfdom, moviedom, newspaperdom, picturedom, playerdom, ringdom, screendom, sportsdom, stagedom, traveldom.

Added to names of animals with meaning ‘world of . . .’ we have the sf in dogdom 1854 (humorous then), catdom 1888, puppydom 1891 H, the recent AE words cattledom, cowdom, horsedom, micedom.

4.21.8. The sf is especially productive in American English. It may be that the influence of German has played a role (cp. also AE -fest which is likewise due to German influence). The influence of German is clearly observable in translation loans such as Manchesterdom 1882, junkerdom (frequent in World War I), Kaiserdom, Germandom (1933), folkdom 1939 (the word Volkstum was a famous propaganda term of the nazis).
4. 21. 9. A few derivatives have been made from predicative adjs, as aware-
dom, topsy-turvydom, and from vbs, as listendom, perh. also boredom, if this is not
from the conversion sb bore. From the pronoun arises selfdom 1863.

The sf -dom sometimes recalls -ism with deprecative words. Cp. gangsterdom/
gangsterism, Nazidom/Nazism, attorneydom/attorneyism. In such cases, the
-ism word denotes the system, doctrine whereas the -dom word is more con-
crete, signifying the collective body of people representative of ...

4. 21. 10. As the latest study of the sf, there is a paper by Harold Went-
worth: The allegedly dead suffix -dom in Modern English (PMLA vol. LVI.
280—306), which has superseded earlier studies by L. Pound and J. M. Burnham.
Wentworth is chiefly interested in the history of -dom since 1800, and he has col-
clected about 300 words coined after 1800. Most of my exs are from Went-
worth's article, but the arrangement here is mine. W. does not treat the
semantic side of the problem.

4. 22. 1. -ed /t, d, id/ (type feathered)

-ed appears as [t] after voiceless cons., as [d] after voiced cons. or vowel,
as [id] after a dental. It forms possessive adjs with the basic meaning
'provided with ...'. It is common Germanic. Though the OED distinguishes
between the sf and the participial ending -ed, both have probably one origin,
as they can be traced back to Indo-European -to (cf. L dentatus, pinnatus,
lanatus / amatus, laudatus etc.). OE instances are hringede 'ringed', biered
'bearded', sceacgede 'shagged'; other words from the OE period are feathered,
galled, kilted, stringed, saddled, shielded. OE and ME coinages are also found
with the prefix ge-: gelandod 'landed', gehlidod 'lidded', geswurdod 'sworded',
gewintred 'wintered' etc., cf. G gelaut, gesint etc., with which we may compare
the more recent type bespectacled, in use from the 17th c. on. The sf has been
productive at all times, chiefly with concrete, less often with abstract sbs.
Exs are cheered, cornered, crested, eared, fleshed, footed, horded, hosed, jointed,
landed, languaged, lettered, measled, mitred, moneyed, pillared (all ME), cheeked,
conceited, featured, fingered, looped, palesied, roofed, shelled, spirited (16th c.),
dropsied, fanged, hinged, hoppd, iced, intelligenced, jaundiced, kingdomed,
leisured, lilied, liveried, partitioned, pebbled, planked, propertiéd, qualityed,
spectacled, wooded (17th c.), cruched, cultured, flavored, frenzied, grasped, idead,
imaged, intellected, ivied, keyed, pronged (18th c.), gabled, irised, killed, moted,
nerved, sclerosed 'affected with sclerosis' (19th c.).

4. 22. 2. There are many csb with well for a first-word, of the type well-
mannered. These csb are not cpds, but free syntactic groups. I mention
them as a special type because without well the words are unusual. Each
member has its own heavy stress, except in preadjunctal position where the
second member shifts its heavy stress to middle stress. The earliest recorded
exs are well-weaponed 1250, well-boned 1297, well-lettered 1303. Later come csb
such as well-behaved, well-bodied, well-breathed, well-conditioned, well-demeaned,
well-disciplined, well-flowered, well-hearted, well-horsed, well-intentioned, well-
looked (cp. well-behaved), well-minded, well-mouthed, well-natured, well-tempered,
well-toned, well-willed, well-groomed.
4.22.3. With a group of words the meaning is 'having the shape or character of...'. These words are chiefly OE or ME, as hooked, ragged, its ablaut var. rugged, forked, dogged, grubbed, cragged, wretched, jagged, peaked, knobbed, piked (pike 'point'), wicked (all ME), piped 1520, orbed 1597, cupped 1796, domed 1775, snagged 'ragged, jagged' 1658. With the oldest group of words a phonetic peculiarity is observable. In almost all of them, the sf is pronounced [id] though the radical is monosyllabic which with words of the group meaning 'provided with...' is the phonetic rule only when the radical ends in d or t. Crabbed, crooked, cragged, ragged, wretched, wretched, wicked have [id] only. This pronunciation was rather than is morpho-phonemic. Words coined after 1500 never have the pron. [id] but are pronounced like ptes of the verb. Other old words have the pron. [d] as the first and the pron. [id] as the second possibility, as hooked, knobbed, peaked while forked has only the pron. [fo(r)kt].

4.23.1. -ed /t, d, id/ (type palefaced)

Deriving adjs from cpds, we find the sf in types inkneed / hunchbacked / palefaced / five-fingered / knock-kneed. But with many of the extended bahuvrihi cbs the underlying basis is not a fixed cpd but a syntactic cpd. The sf is also frequently tacked on to other syntactic groups, for which we have a variety of types: powdered-headed / bigger-sized / kindest-hearted / no-hatted, unmanned, undermanned, overmanned.

4.23.2. As far back as OE, the bahuvrihi cpds of the types paleface and five-finger began to take the sf -ed which gave the words an outspoken adjectival character (cf. the same adjectivizing tendency in G through -s- extensions, as einhändig a.o.). Extended bahuvrihi cpds have become one of the most prolific adjectival types. The term 'extended bahuvrihi cpds' is to be understood as descriptive of the pattern only. Historically speaking, the cases of suffixed bahuvrihi cpds are few. Most of the underlying themes are not cpds at all, but mere syntactic groups, and the extensions are synthetic cpds, i.e. cpds by right of the pattern only (see 2.1.5). Although extensions of bahuvrihi cpds are as old as OE, most of the cbs used today are MoE (a very great number were coined between 1500 and 1650). Extensions of the type hunchback are MoE. Only a few cbs go back to OE, as one-edged, two-edged, one-eyed, three-footed, three-headed. From ME (14th and 15th c.) are recorded heavy-handed, heavy-hearted, high-hearted, ill-tongued, ill-mannered, ill-disposed, proud-hearted, simple-hearted, long-lived, left-handed, light-footed, light-handed, light-hearted / three-shafted, three-cornered, three-edged, three-leaved (-leafed), two-footed, two-handed.

I now give a small selection of examples.

4.23.3. T. palefaced (coinages are practically unlimited in number): broad-limbed, bare-legged, yellow-haired, cruel-hearted, heavenly-minded, heavy-handed, heavy-headed, hard-fisted, hard-handed, hard-hearted, hard-headed, high-handed, high-mettled, high-minded, high-pitched, high-spirited, high-toned, hollow-eyed, hot-blooded, hot-headed, kind-hearted, large-handed, large-hearted, long-breathed, long-eared, long-headed, low-browed, low-spirited, mad-brained,
many-headed, many-sided, mealy-mouthed, narrow-eyed, narrow-minded, open-eyed, open-handed, open-hearted, public-spirited, raw-boned, short-lived, short-sighted, single-handed, solid- hoofed (-hooved), strong-headed, strong-minded, sweet-scented, swift-footed, thick-headed, wrong-headed.

4. 23. 4. The first-word is a second ptc in powdered-headed, mottled-faced, carved legged. Jespersen has rawboned-faced (i.e. the type as first-word), opened eyed, cocked-hatted. This group is weak.

The first-word is the comparative or superlative form of an adj in bigger-sized, better-featured, flatter-cheeked, prettier-colored / kindest-hearted, sweetest-tempered, lightest-hearted (these and other exs in Jesp. VI. 24. 18).

Sometimes we find cbs with adjectival pronouns as first-words: no-hatted (Wells). Jesp. has what coloured, what aged, same shaped from Rose Macaulay and others. This type is literary.

4. 23. 5. Type hunchbacked. The earliest example seems to be prick-eared c 1420 (prick understood as something pointed), but other exs are MoE only. Exs are bow-legged, coal-eyed, cone-shaped, canary-colored, eagle-eyed, cock-eyed, heart-shaped, hen-hearted, chicken-hearted, hare-brained, honey-mouthed, honey-tongued, hump-backed, hunchbacked, iron-handed, iron-hearted, milk-livered, pidgeon-toed, pig-headed, pot-bellied, rat-tailed, ring-necked, ring-tailed, spindle-legged, swallow-tailed, metal-edged, razor-edged, hook-shaped, shovel-hatted, gold-laced, gold-headed, snuff-colored, metal-visaged, purple-pointed, silver-belted, air-minded, crime-minded etc.

4. 23. 6. The type five-fingered is very productive. Exs are one-eyed, one-eared, one-handed etc., two-faced, two-forked, two-headed, two-leaved, two-legged, two-parted, two-sided etc., three-legged, three-sided etc., four-footed, five-bulbed, eight-locked, eight-angled, eight-celled etc., nine-eyed, nine-circled, nine-cornered etc., ten-acred, ten-footed, ten-horned etc., twelve-banded, twelve-gated etc., twenty-breeched, twenty-colored. As a matter of course, the lower numbers are much more common.

4. 23. 7. Type knock-kneed. The first-word is a verbal stem, i.e. cbs are extensions of t. rattlesnake words. Their number is limited. Mope-eyed 1606 (mope ‘be bewildered’) ‘purblind, short-sighted’, lopsided 1711 (orig. said of ships), knock-kneed 1774, draggle-tailed 1654 (Dickens has also draggle-haired coined after it), crack-brained 1634, crack-headed 1796, shatter-brained 1727, scatter-brained 1804 (the four last have by-forms without the sf), sway-backed 1680 (said of a horse) ‘having a downward curvature of the spinal column’ (the OED suggests Scandinavian origin, but the cb is quite naturally explained from sway ‘bend downwards etc.’, as by weight or pressure, sense recorded since 1577), stumble-footed.

4. 24. 1. -eë /i/

With the Norman conquest, French became the language of the law courts. Although by the decree of 1362 English was officially established as the language of jurisprudence, French continued to exercise a dominant influence, and legal English was for centuries little more than anglicized Law French.

14 Marchand, The categories
IV. Suffixation

There existed in AF word pairs such as donee/donor, feoffee/feoffor, lessee/lessor which, in an English context, do not occur before the 15th c.: donee 1523/donor 1449, feoffee 1411/feoffor 1440, lessee 1495/lessor 1487. The sb in -ee is a passive noun (orig. a substantivated French second ptc), the sb in -or is the agent noun. In the preceding pairs the sense relation is that of ‘one to whom something is given’ / ‘one who gives’. The -ee sb, syntactically speaking, is thus the indirect or prepositional object of the verb. Exs belonging here are assignee 1467 H, committee 1495, appeltee 1531, debtee 1531, grantee 1491, vendee 1547, recognizee 1544, mortgagee 1584, depositee 1676, obligee 1559, paynee 1633, referee 1621, trustee 1647, transferee 1736, payee 1758, petitionee 1764 (U.S. law), drawee 1766, abandonee 1848, scrippee 1909 (U.S. law) ‘one to whom land is allotted by scrip’.

4.24.2. Though -ee sbs were originally coined as counterparts of -or sbs, they subsequently came to be associated with the underlying English verbs, and from the 17th c. on we have direct derivation from infinitives (t. draw), as the preceding exs show. Many could also be connected with their bases understood as sbs, which explains chargee ‘holder of a charge upon property’ 1884, formed after mortgagee analysed in a similar way and patentee 1442, orig. ‘one to whom letters patent have been granted’.

4.24.3. In AF, there were also passive sbs which syntactically would be the direct object of an active verb. Of this type (which Elna Bengtsson, Studies on Passive Nouns in English, Lund 1927, calls ‘direct passive nouns’, as contrasted with the ‘indirect passive nouns’ of the above group) are words such as ordinee ‘ordained clergyman’ 1330, assignee ‘deputy’ 1419, presentee 1498, nominee 1664, appointee 1768.

The group of direct passive nouns has recently come into favor esp. with words of official military jargon. Exs are draftee (World War I word), selectee, enlistee, trainee, rejectee (RD 44. 5. 105), evacuee (about 1939, coined without -ate like nominee, congratulee). The suffix is a vogue morpheme which has formed many words of a more general application in present-day American English. But many of these have a playful nuance and a decidedly transitory character. A few examples are divorcee, seductee, slanderee, honoree, internee, rushee, educatee, laughee, congratulee, visitee, holdupee, pollee, guizee, squeezee. An older word of the type is invitee 1837.

4.24.4. A few words have a non-passive character. Conferee ‘one who takes part in a conference’ is coined in phonetic imitation of referee. Other words, all AE, are standee, returnee, escapee, tryoutee ‘one who tries for a position on a competitive basis’, beatere (with double suffix) ‘person or thing that beats all’. Cp. ASp 16 (1941) 306.

The word absentee 1537 is explained in the OED as ‘f. absent v. + -ee’. It does not fit the general pattern, as it has not a passive meaning. It may have been coined as Law French from the vb s’absenter as F réfugié is derived from se réfugier.

4.24.5. Unrelated to the sf is -ee as found in several words of heterogeneous origin. Pharisee, Chaldee (both Wyclif) represent L words in -aeus. Pharisee has an OF pattern pharise; for Chaldee none appears to be recorded, though it
may have existed. Brahminee 1811 is coined after Bengalee 1613 which represents native Bangali. Townee 1897 'townsman' (as dist. from a member of the university) may be a jocular formation with the lengthened hypocoristic -y, -se. The same formation we seem to have in bargee 1606 'bargeman', goalee 'goalkeeper', coachee, coachy 1790 'coachman', in bootee 'infant's wool boot', coatee 'close-fitting coat' 1775, shirtee 1818 AE 'shirt-front' (i.e. not a full shirt). A recent coining after the pattern is spattee 'kind of legging for women and girls' 1926 (fr. spat; influence of puttee, pron. ['pɑːtɪ], which the OED suggests, is less probable). Settee 1760 fits in nowhere, but has attracted chariotee 1863. Mufftee 1706 'muffler, cuff' is lengthened -ety (see sf 4.80.8 -ety) tacked to muff.

4. 25. -eën /in/

is an Anglo-Irish sf with individualizing or diminutive force. It is Irish diminutive -in. Only a few words have been coined, as buckeen 'dandy, dashing fellow' etc. 1793, squireen 'petty squire' 1809, jackeen 'self-assertive fellow' 1840. The one non-deprecative word is girleen 1836.

The main stress is on the sf, except with girleen which has forestress.

4. 26. 1. -eër /ir, ɪə/

is orig. F -ier in words borrowed chiefly since the 16th c. For some time -eer varied with the form -ier from which it has been distinct in spelling since the 17th c. In French words, -ier denotes the holder of a profession, but those words which gave rise to the English sf were of a special kind. Early loans are charioteer 1340 (a blend of OF charioteur and charretier) and engineer 1325 (OF engineor etc.) which were later (17th c.) adapted to the sf. Another loan is muleteer 1538 which may have helped to change the Ec mountaineer 1598 into mountaineer 1610.

4. 26. 2. Other terms belonged to the military sphere, as pioneer 1523, cannoneer 1562, bombardier 1560, volunteer 1600 (irr. f. F volontaire). Buccaneer 1660 (f. boucanier) was orig. applied to the French hunters of St. Domingo who also infested the coasts of Spanish America by piracy. The first Ec of this group is privateer 1642, a private volunteer, so to speak, perh. jocularly used for a captain or a ship that held a commission from the government for warlike action, but remained a private person resp. private property. Few other coinages in this semantic field have been made; we may cite the now obs. blanketeer 1775, also used for a group of demonstrators in Manchester 1817, and pistoleer 1832.

4. 26. 3. The idea of battle was extended to that of literary and oratory battles, and words like pamphleteer 1642 and pulpiteer 1642 were coined. A derogatory shade of meaning could not fail to become attached to such words, and Dryden's sonneteer 1665 is clearly mocking. They were later followed by garreeter 1720 'literary hack'. Gazetteer 1611 (= F gazettier, now gazetier), for some time acquired the same tinge of odium as Johnson's explanation shows: "gazetteer, it was lately a term of the utmost infamy, being usually
applied to wretches who were hired to vindicate the court”. It lost this tinge prob. through its connection with gazette ‘official journal’. A very new word of this group is jargoneer ‘jargon-monger’ 1913.

There are also words of another description which were formed with a derogatory nuance, as profiteer 1797, crocheteer 1815, obs. waistcoateer ‘low-class prostitute’ 1616 ‘one who pushes his erotchets in politics’, racketeer 1928 AE.

Jespersen (La 19. 15) would restrict the derogatory shade of the sf to words in -eer. But against this are fictioneer 1923, jargoneer 1913, sloganer rec. AE. On the other hand, marketeer 1823 U.S. has no such tinge, though black marke-teer has, of course.

4. 26. 4. -eer is a vogue sf in recent American English with words such as conventioneer, picketeer, revolutioneer (joining the ‘battle’ group above), packeteer ‘one from the crew of a packet-boat’, chariteer, vacationeer, motorneeer ‘trolley motorman’, basketeer ‘basketball player’ a.o. which will have to stand the test of time. Priestley uses pavenenteer. App. without any tinge are auctioneer 1708, cleareteer 1679, routineer 1875.

A few words denote inanimate objects, as gazetteer 1704, muffineer 1806 ‘instrument for sugaring muffins’ (perh. vaguely after F sucrière).

4. 27. 1. -en /ən/ (type wooden)

The sf originally denotes appurtenance (corr. to L -inus in marinus, cp. also the variants with other vowels, as -ānus, -ānus, -īnus). The chief use of the sf is with sbs denoting material, and the adjs derived from them have the meaning ‘made of, consisting of . . .’ and ‘resembling, like . . .’. The first one is preserved today only in dialects where steelen, tinnen, paperen ‘made of steel, tin, paper’ a.o. are found (see OED s.v. -en suffix4). The second sense is the only one current in present-day StE.

4. 27. 2. OE adjs have i- mutation: gylden, liiferen, cyperen, stēnen, wezen.

But these forms, as far as they survived, were in ME refashioned after the sb: golden, leathern, stoned, waxen. Adjs going back to the OE period are also rushen, treen, wheaten, leaden, silken, brazen (now no longer felt to be connected with brass), glazen, refashioned glassen, beechen, woolen, heairen. Later were coined aspen, hempen, ashen ‘made of the wood of an ash’, oaken, oaten, earthen, threaden (all ME), birchen 1440, flaxen 1520, wooden 1538, twiggien 1549, milken 1570, ashen ‘ash-colored’ 1808, larchen, cedarn.

4. 27. 3. The meaning ‘made of . . .’ is today preserved in a few StE words only, such as earthen (but also in sense ‘earthly’), wooden, woolen, birchen. With the figurative meaning, more words are in common use: we speak of a leaden sleep, a wooden head, a silken voice, a golden wedding, a waxen heart, flaxen hair etc. In the old material sense, sbs used as adjuncts are now the rule. According to OED this tendency set in in the 16th c. We now speak of gold and silver watches, leather cases, silk stockings etc.

4. 27. 4. A few adjs have developed sbs: hempen ‘hempen cloth’ 1777, aspen ‘asp tree’ 1596, flaxen ‘flaxen material’ (sense obs. now, in use 1520—1696). With linen and linden we have even lost the feeling that they were originally
adjs. *Linen* OE is derived from OE *lín* 'line (obs.), flax', *linden* OE is derived f. OE *lind* 'lime'. *Heathen*, OE *haißen* renders L *pag-anus*.

*Maiden* does not, originally, belong to this group. It goes back to OE *mægdan* which is connected with *mæg* 'son, man' as its feminine (cp. L *puer/puella*). The sf is the same as in *vixen*. *Maid* is back-derived from *maiden*. Possibly in connection with our adjectival group in -en, the word *maiden* developed a tendency to be used in adjunctal function (for a description see Jesp. VI. 20. 44). A parallel development is *lenten* which, from obs. such as *lenten day*, *lenten fast* became established in adjunctual function, developing *lent* in ME.

4.27.5. Of the Indo-European formative -n- which underlies -en there is an r- extension, originating with r- stems, as in L *pater*, *internus* f. *pater*, *inter*, then independent as in *hodiernus* f. *hodie*. The English sf is -ern /e(r)n/ which has only formed adjectives from the names denoting the points of the sky: eastern (OE *éasterne*), southern (OE *súfere*), western (OE *westerne*), northern (OE *norþerne*). The derivational relation between the adjs and their bases is fully alive in *eastern* and *western* only. For the others see 4.1.22.

4.28.1. -en /en/ (type darken)\(^1\)

This sf is a result of secretion. OE verbal derivatives from nominal stems in -n regularly ended in -nian, as *fægenian* f. *fægen* 'fain', *openian* f. *open*, *tæcnian* f. *tæcen* 'token'. This ending -nian subsequently acquired the character of a separate sf, as in Old North. *berhtnian* f. *berht* 'bright', *læcnian* 'heal' f. *leœc* 'leech', *prætnian* f. *præat*. OE *fæstnian* is derived f. *fæsten* 'fortress', but was prob. felt to be connected with adj *fæst* 'fast', too. We know nothing about the motives which led to the extension of the sf. There was a similar tendency in Gothic and OHG in the extended sf -inôn (see Wi 79), which was, however, arrested subsequently.

The process grew, and later we find *greaten*, *harden*, *listen*, *sicken* (13th c.), *blacken*, *deaden*, *gladden*, *happen*, *lighten* 'shine', *lighten* 'make light', *meeken*, *lessen*, *loosen*, *quicken*, *slaken*, *strengthen*, *soften*, *whiten* (14th c.), *thicken*, *worsen* (15th c.), *bolden*, *brighten*, *chasten*, *cheapen*, *deafen*, *fatten*, *glassen*, *hasten*, *heighten*, *hearten*, *lengthen*, *moisten*, *rougen*, *shorten*, *slacken*, *stiffen*, *straighten*, *sweeten*, *weaken* (16th c.), *deepen*, *flatten*, *dampen*, *freshen*, *frighten*, *milden*, *redden*, *ripen*, *sadden*, *smoothen*, *widen* (17th c.), all derived from earlier simple verbs. More recent are *brisken*, *broaden*, *madden*, *hoarsen*, *tighten* (18th c.), *smarten*, *steepen*, *tauten*, *quieten*, *olden* (19th c.), *neaten* 1898.

4.28.2. For the present-day speaker, most of the preceding verbs derive directly from adjs. The development is, however, historical. Jespersen has shown that the verbs in -en were not originally formed on adjs, but were up to EMOE extensions of existing verbs. But in course of time, connection with the corresponding adjs came to be felt. It cannot be said with certainty when this feeling arose. But de-adjectival analysis was prob. dominant as early as the second half of the 16th c. (Jespersen takes 1660 as the time limit): *toughen*.

is from 1582, but no unextended verb is rec. in OED; widen is rec. 1607 and
cannot be the extension of the vb wide which is not instanced after 1440 in OED.

In all the stages of productivity, only stems ending in a stop or fricative
have lent themselves to this type of derivation, and in the last two hundred
years, only adjectives in t and ð seem to have been formed, whereas adjectives
of a different phonetic buildup derive without a derivative morpheme (type idle vb fr. idle adj). Cf. 5. 3.

"There are no examples of n-vbs formed from adjs in vowels (or diphthongs):
free, blue, low, slow, high, sly, shy, new; narrow, yellow, steady, holy; nor of such
disyllables as able, noble; nor of adjs in m, n, y, r: slim, thin, brown, clean, long,
strong, far, poor, near" (Jesp. VI. 20. 55).

4. 28. 3. Like other de-adjectival verbs, -en vbs express change of state, so
darken may mean 'make dark' as a transitive-causative vb, or 'become dark'
as an intransitive vb.

4. 28. 4. While the main stock of -en vbs have an adjectival basis, there is
a group of vbs which are derived from sbs. This has, however, only historical
significance and does not bear on the present-day derivational pattern. As
-en vbs were originally mere extensions of vbs without the sf, it did not matter
whether the basis of the vb was an adj or a sb. OE hlystan 'list' has a North.
by-form lysna, and listen is common from ab. 1200 (fr. list sb, dead since ab.
1400), OE þréatian 'threat' f. þréat also existed in the extension þréatnian
'threaten', while the other OE -n extensions (see above) soon ceased to be
analysable as such. But as the majority had an adjectival basis, this adjectival
element turned out to be important and decisive for new formations. The sf
did not become productive with desubstantival bases. As a matter of fact,
there is only one desubstantival word from the time when -en had become
a deadjectival sf with vbs, viz. the vb frighten 1666. It was probably coined
as the counterpart of hearten 1526. Semantic elements may have helped to coin
some earlier desubstantival verbs, too. Threaten had in OE the meaning 'urge,
press', and in ME developed the nuance 'try to influence by using menaces'.
This may have led to strenghten on the basis 'try to influence by giving (moral)
strength'. The original meaning of strengthen (14th c.) is, indeed, 'give courage'.
Into this group, hearten 1526 and its opposite frighten fitted easily. On the
other hand, the sense 'give strength' made possible the vb lengthen, orig. 'give
length', i.e. 'eke out', and lengthen was followed by heighten 1523.

4. 28. 5. Verbs coined before the 19th c. whose stems end in /ft/ or /st/ drop the
/t/ before the sf (for the phonetic side of the problem see Jespersen MEG I. 7.7. 7.
34—5): fasten, glisten, hasten, listen, moisten/soften. Swiftion 1839 keeps the /t/.

4. 29. -er /o(r)/ (type clatter)
forms disyllabic verbs expressive of sound or movement. It is suggestive of
reiteration, continuation or the like. To OE go back clatter, stammer, flutter,
flicker, shimmer. ME are titter, totter, waver, quaver, shudder, mutter, chatter,
batter, glitter, glimmer, clamber (abl. var. of climb), quiver, jabber. After 1500
are recorded flutter, blatter, stutter, sputter, whimper (16th c.), snicker, hanker,
patter, titter 'laugh', gibber, splutter (17th c.), snigger, whinner (18th c.), jigger, flecker (19th c.).

Like many verbs in -le, -er verbs are not suffixal derivatives. A few words only are historically analysable as root and sf, as quaver, patter, shimmer (f. OE scimian). Chatter is the original from which chat was later derived. Words in -er are compounds of several symbolic elements one of which is final -er. The difference between -le and -er is small: words in -er denote continuous duration, uninterrupted succession of sounds or movement whereas -le is more or less suggestive of repeated small acts. But very often, the choice seems dictated by phonetic reasons: an /l/ of the basis excludes -le as the final element, an /r/ in the root will not attract -er as a final. We say clatter, flutter, flitter, glitter, glinger / sparkle, spiritle, prattle, wriggle, drizzle etc.

4. 30. 1.  -er /o(r)/ (type baker, collier)¹

forms denominal and deverbal sb's designating 'one connected with ...'. The sf may or may not be L -arius. It is not clear whether the denominal or the deverbal function is the original one. The OED and Jespersen hold that the denominal type is original, a view which is borne out by L -arius and Goth. -areis which form denominal words only (cp. Wi 222). On the other hand, OHG deverbal coinages are much more numerous than denominal ones (cp. Kl/DW 40; see also Henzen 98). Tacked on to verbal stems, the sb forms agent nouns with the meaning 'one who performs an action (once, or habitually)'.

4. 30. 2.  The agent may be animate or inanimate. Examples of personal sb's are baker, commander, dancer, driver, gambler, hunter, informer, meddler, mixer, mover, packer, preacher, printer, rider, sponger 'parasite', spotter 'spy', squatter, stroker 'one who cures by stroking', stroller, sweeper, singer, swimmer, tanner, teacher, tawer 'one who taws white leather', trafficker, trainer, trapper, traveller, waiter, wanderer, weaver, writer, wrecker etc. etc.

4. 30. 3.  Words denoting animals are pointer, retriever, setter, tuffer 'hound used to drive the deer out of cover', skirtor 'hound', springer 'spaniel' / spanker 'fast-going horse', trotter / scratcher, screamer, tatler, wood-pecker, warbler, washer (birds) / shadder, shiner, spawner, thrasher 'fox-shark' (fish) / squeaker 'bird or pig', sitter 'bird or hen', slider 'an American turtle', spinner 'spider', denominally coined thiller 'thill-horse' = wheeler.

4. 30. 4.  The agent is a device, tool, implement, machine or the like, i.e. a material but impersonal agent in words like blotter, atomizer, bailer, borier, boiler, eraser, gadder 'instr. for splitting stones', knocker, lighter, fertilizer, poker, silencer, shutters, scratcher, scraper, scutter, seeker, sender, transmitter, snuffer (for candles), stopper, strainer, suspenders, toaster, trailer, voucher 'document', speller AE 'spelling-book' / from intr. vbs are cracker 'biscuit', creepers, streamer 'flag', tumbler orig. 'glass without a foot' / refresher, chaser, bracer.

4.30.5. Names for immaterial agents are reminder, eye-opener, poser 'question', thriller, shocker, settler, finisher, starter, clencher or clincher 'conclusive argument', slashinger 'severe criticism', smacker 'blow, kiss', snapper 'finishing word', stickler 'poser', stinger 'crushing argument', stunner, thumper 'lie', toucher 'very near approach', trier 'difficult problem', twister = staggerer 'something that confounds', tracer 'inquiry for a missing article'.

4.30.6. Slang is rich in -er words. A few are squealer 'informer, complainer', rasper 'irritating p.' fumbler 'impotent man', pot-rustler 'camp cook' AE, / smeller = snorer 'nose', sparkler = goggler 'eye', pickers = stealers 'fingers', creepers, kickers 'legs', swallow 'throat', tinker 'watch', clinkers 'fetters', cooler 'prison' (U.S. thieves' slang), snorter 'gale', stifler 'gallows', wiper 'handkerchief', popper 'pistol', bone-shaker 'old-fashioned bicycle', clomper 'heavy boot' (ADD) / smasher 'crushing argument', corker 'settlement, lie', clipper 'sth first-rate', bouncer 'barefaced lie'.

4.30.7. There are a few names for garments, most of them with a verbal basis. They cannot, however, be interpreted as agent nouns but must be considered parallel to compounds, of the t. whetstone (see below). A slipper is understood as a 'slip-shoe', on the same footing as the type sleeper. Exs are slipper 1478, wrapper 'headress' 1548 (other senses are newer), drawers 1567 (there is no reason to suppose 'low origin', (OED), the word is simply 'a drawing garment', orig. also used for stockings; drawers caused trance 1578 (trews 1508) to be refashioned into trousers 1599. More recent are tucker 1688 H 'a piece of lace worn by women round the bodice in the 17-18th c.', weeper 'badge of mourning' 1724, starcher 1818 H 'starched neckcloth', waders 'waterproof boots' 1841, tier 1846 AE 'pinafore', sweater 1882, jumper 1853, slicker 1884 AE 'waterproof coat' (or f. adj slick), rompers 1922 'washable overall for children'. A denominal coinage, semantically belonging here is stomacher 1415 'kind of waistcoat' etc. (stomach was formerly frequent in sense 'chest').

4.30.8. The instrument by means of which something is done may come to be looked upon as the place where the action is done if the idea of place is more in evidence than the idea of instrumentality. This explains boiler, scribbler 'writing pad' (J. Joyce, not in OED or Spl.), locker, container, kneeler 'stool to kneel on', also dresser, counter, trencher though these originally represent F dressoir, comptoir, trenceoir. Drawer 'receptacle' 1580 H partly belongs here, but the notional basis of coining is that of agent, the word meaning 'sth which draws out things (contained in it)'. The OED lists this word as a separate sb drawer, without explaining its standpoint. As a matter of fact, the OED regards deverbal -er as a sf of agent nouns only (see OED -er suffix) and cannot therefore account for deverbal derivatives in -er which are coined on a non-agental basis.

4.30.9. In the majority of cases the sb is an agent noun, but themes other than agential are not excluded. Suffixal derivatives are compounds, so -er may theoretically stand for any substantival second-word. Derivatives are thus parallel to composites of the types whetstone/rattlesnake/mincemeat (2.7), which are based on the relation of agent, purpose etc. in com-
bination with the verbal idea. The group designating garments, for instance, is parallel to the t. whetstone: the underlying theme is that of purpose, destination. The type mincemeat is matched by words such as tucker, starcher, tier, but the type is weak. Words not coined with the underlying theme of agent are 16th c. and later (the oldest coinage appears to be slipper 1478). OE deverbal derivatives with the sf are all agent nouns. To the oldest stock belong baker (baecer f. bacan), blower (blauere f. blawan), follower (folgere f. folgian), fowler (fugelere f. fuglian), at the same time connected with sb fugel, leaper (hleaper e. hleapan), learner (learner e. leornian), obs. leaser (læsere ‘liar’ f. læsian), lender (lænere f. lānæ), monger (mangere f. mangian), thrower (frôwere f. frówian), whistler (hwistlere f. hwistlian). In OE there were, beside our type, agent nouns in -a and -end which have not survived. They merged into -er which grew very strong in the ME period (for ME exs see Langenfelt 77ff.).

4.30.10. Many words join various sense groups. I give a few exs only: sweater may mean ‘hard worker’, ‘a sudorific’, ‘a woolen vest’; swimmer may denote a person, a bird, a swimming organ; taster may be applied to a man, an implement; it may also denote a portion of food; trimmer denotes a person, an implement, a beam, a run, blow etc.; twister is used for persons, devices, or some immaterial agent; a wrapper may be a person, a covering, several kinds of garments; scorcher may mean ‘hot day, rebuke, a p. who motors furiously’.

Synchronically speaking, pairs of words of the type peddle / peddler, pedlar (6.1) belong here, too.

4.30.11. With denominal derivatives the original idea underlying them is ‘one professionally connected with . . .’, as in potter f. pot. The type is OE though most of the PE words are ME or later. Exs are OE bœcere ‘scribe’ (f. boc ‘book’), sangere ‘singer’ (f. sang ‘song’), sêdere ‘seeder, sower’ (f. sêd ‘seed’) fiscere ‘fisher(man)’ (f. fisce and fisccian), piper (f. pipe and pipian), hafocere ‘hawk’ (f. hafoc ‘hawk’). ME are kitchener ‘one employed in the kitchen of a monastery’, birder ‘fowler’, miller (vb 1552), obs. linener ‘linen-dancer’, nutter (vb 1604). Later are tinner 1512, stockinger ‘stocking-weaver’ 1741, podder 1681 ‘one employed in gathering peas in the pod’. Cp. also milliner 1529, orig. ‘native or inhabitant of Milan’.

With the meaning ‘maker or seller of . . .’ are coined bottler, capper, girdler, glover, needle, potter, pepperer ‘dealer in . . .’, pursuer ‘maker of . . .’, roper, Saddler, tiler (all ME). After the ME period, the type has no longer been productive.

4.30.12. Many words which were orig. loans of French words in -(i)er, -our have joined the native group of words denoting one holding a profession, so, for the PE speaker, they contain the same sf -er now. Exs are farmer, gardener, juggler, jeweller, accuser, commander, miner a.o.

4.30.13. Substantives denoting branches of learning characterized by the termination -graphy, -mancy, formerly also -logy derive personal sbs in -grapher, -mancer, -loger. The -er of this type as well as the others was orig. not felt to represent the native sf but OF -er, cp. horologer 1496, for a long time spelt
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horloger, repr. OF horloger (14th c.), chirographer which is first quoted in AF form cirogrofer (in French context), going back to LL chiro-grapharius; the original form of astronomer is astronomyer 1366; astronomer is regular from the 16th c. only.

4.30.14. The type historiographer does not appear to be older than the end of the 15th c. The oldest exs I have found is the title word, rec. 1494. Later are chronographer, hydrographer, chirographer, geographer, cosmographer, scenographer (16th c.), glossographer, mimographer, logographer, lexicographer, tambographer, hymnographer, hagiographer (17th c.) a.o. A few have by-forms in -ist, as calligraphist, chalcographist, cryptographist, demographist, ethnographist a.o.

Exs for words in -mancer are geomancer 1400, chiromancer 1566, astro-mancer 1652.

4.30.15. The type astrologer goes back to the 14th c. The title word is rec. 1374. A little later is horloger, in form horloger quoted 1496, which is, however, OF horloger. Later are chronologer 1572, philologer 1588, physiologer 1594, mythologer, etymologer (17th c.). Geologer is a modern coinage of the type (1822), but the usual word is geologist 1795, and -ist has practically superseded -er in this group. For astrologer, however, no -ist word exists.

The sf -er has also spread to a few other sbs denoting agents. There is astronomer, orig. in form astronomyer 1366, from 16th c. astronomer. The word physiognomer (1500—1706) is obsolete now, and abstract sbs in -onomy derive agent nouns in -nomist. Scrivener is a LME extension from scrivyn (= OF escrivain), musicianer is extended from musician; practitioner is a refashioned and extended form of earlier practician; parishioner is extended from earlier parishion, parishen. Obs. collegianer 1546 is app. F colligien + -er.

4.30.16. Except for the preceding types in -grapher, -mancer, -er has long become unproductive for the derivation of agent nouns from substantives (not from verbs). The modern type are compound sbs, as watchmaker, hairdresser. Cbs with -man as a second-word are especially productive: cattleman, milkman, postman etc. / steersman, batsman etc. (see 2. 2. 2; 2. 5. 1—3).

4.30.17. In a number of words most of which are now obsolete or only used with reference to history, we have the characteristic ending -erer. In some of them (cellarer ‘officer in a monastery having charge of the cellar’ 1300, waferer ‘maker of wafers in royal or other great households’ 1362, ewerer ‘ewer servant at table’ 1450, larderer ‘officer in charge of the larder’ 1483), the morpheme -er is simply attached to a nominal stem ending in [ar]. In others a (usually monemic) word in -er is matched by a substantive in -ery, -ry, as fermerer ‘superintendent of a monastic fermery (= infirmary)’ 1386—1483 / fermery 1377, panterer ‘officer in charge of the pantry’ 1420 / pantry, orig. in form pastery or paneiry 1300, waferer 1362 / wafery 1450, larderer 1483 / lardery 1538, napery ‘official in charge of the royal table linen’ 1494 / napery ‘table linen’ 1380, pasterer ‘pastry cook’ 1552—1660, fripperer ‘dealer in cast off clothing’ 1584 /frippery 1568.

Originally, the termination -erer seems to have been felt characteristic of words denoting officers or superintendents in monastic, royal, or other great


households. The greater part is connected with food: cellarer, larderer, waferer, panterer. Several words which originally ended in -er only, were made to fit into the -erer pattern, as panterer (f. panter 1297), ewerer (f. ever 1361, partly because ewer also denoted the water jug itself). Feuter 'keeper of grey-hounds' 1340 was refashioned into feuterer (prevalent since about 1550). Some words were also used for independent craftsmen or shopkeepers, as waferer 'wafer-seller', fruiterer 'fruit-seller' 1408, pasturerer 'pastry cook', poulturer 1638 (f. earlier poultier 1400). Caterer 1592 belongs here semantically; perhaps also formally if we consider it to be an extension of synonymous cater 1400 (but it may be a regular agent noun derived from the verb ceter 1600). The analogy of naperer / napery may have prompted the coinage fripperer / fripery (the word fripper 1598 has also been coined).

On the one hand, there once was a tendency to use the termination -erer with the particular group we have just described. The only word, however, in which -erer is the derivative morpheme, is fruit-erer. On the other hand, a derivational connection between words in -ery and such in -ler was at one time felt to exist. However, the alternation -ery / -erer had little chance of prevailing, as the common derivative alternation was that of -ery / -er, as in bak-ery / bak-er (see 4. 32. 7). Of the words discussed above, only poulterer, connected with the collective noun poultry, has survived. The pattern may have derived adulterer 1370 f. adultery 1366, sorcerer 1526 f. sorcery 1300, upholsterer 1613 f. upholstery 16649 (upholstery must then be older than the first record in OED). But it is also possible that adulterer and sorcerer, matched by the older forms adulter 1382 and sorcerer 1300, were coined as the masculine counterparts of adulteress 1382 and sorceress 1384 (see 4. 35. 2).

4. 30. 18. The sf -er has a by-form -ier, found in bowyer 1297, collier 1350, sawyer 1350, glazier 1385, lawyer 1377, spurrier 1389, brazier 1400, hostier 1440, clothier 1470 (orig. clothier 1362), grazier 1502, furrier 1576. The words are all derivatives denoting craftsmen or the like. Koziol (436) explains the sf as having originated in agent nouns from vbs in -ian, -ien, as louier, makier. This is more than doubtful as neither bowyer nor collier can be deverbal derivatives; the vbs are recorded from the MoE period only. I think -ier is due to French words such as corier, cotier, soldier which, in English, gave currier 1380, cottier 1386, soldier 1300. Cot was an independent word, so F cotier was easily connected with it. As there were no verbs to go with the sbs, the danger of the sb being swallowed by -er was little. Thus -ier settled as a sf with personal sbs to designate one who is professionally connected with ... In some cases, earlier -er was changed into -ier, as in clothier, sawyer, soldier. Lockyer 'locksmith' 1356 is now obsolete. The word courtier (orig. courteour 1290) had its spelling refashioned after the words of this group (the spelling courtier is first recorded for 1481 in the OED), perhaps under the influence of soldier or squire (the earlier spelling was squyer). Lawyer also has earlier forms in -eour (laweour). Lawyer and courtier are, anyhow, exceptional in this group of words denoting craftsmen.

Glazier came to be derivationally connected with glaze vb, and the alternation glaze/glazier attracted graze/grasier, braze/brazier (the verb braze is recorded 1552; OE brasian apparently did not survive into ME). However, neither the
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original denominal group bow-ier nor the deverbal group glaz-ier maintained productivity in the MoE period, owing to the much stronger and older patterns of derivation in -er. The unproductiveness of the nominal group has led to phonic and/or semantic dissociation between basis and derivatum. In part, the derivatives now stand for contents and referents no longer quite familiar in present-day life: bowyer, spurrier, brazier, grazier, even glazier which is little used in American English. The word hosier is not used in American English either, nor is collier. Alive are lawyer, sawyer (a man who saws in a lumber mill), furrier, and clothier, the latter now associated with clothes as against original derivation from cloth.

Interpreting -ier as an allomorph of -er, and bearing in mind that derivation with native suffixes involves no phonological changes, we have to state that the alternations observed in coal|collier, glass|glazier, grass|grazier, hose|hosier are not relevant to the present-day derivative system.

4.30.19. The sf -er can be tacked on to almost any basis: a simple or compositive sb or adj, a numeral, all kinds of phrases, on the general semantic basis 'he who or that which is connected with or characterized by his appurtenance to ...'. Words coined this way chiefly denote persons, but there are also names of material, rarely immaterial things. The sf, so to speak, stands for a great variety of full second-words, as the exs show. The following is an attempt at a survey, not an exhaustive treatment. No type is older than ME.

4.30.20. Type banqueter 'person connected with ...': bencher 'judge', banqueter 'guest at a b.', clubber 'member of a club', commissioner 'member of a c.', conveyancer 'lawyer specialized in conveyances', covenanter, golfer, laker 'one of the lake poets', letterer, mealer 'one who takes only meals at a boarding-house' AE, roomer, petitioner, pleasurer 'pleasure-seeker', prizer 'prizefighter' (arch.), remembrancer (official), trammer 'one who removes the trams of coal' etc., trooper, probationer 'p. on probation', warder.

4.30.21. Type Londoner 'person from ...'. Derivation is chiefly made from names of towns or cities, but also from names of countries, regions and names denoting various kinds of places. Exs are Londoner, Dublínér, Birmínghamér, New Yorker, Vermontér, Berlinér, Hamburger, Danziger / Islandér, Holländer, New Englandér / borderer, cottager, villager, islander, highlander, lowlander, swamper AE, norther AE, backwoodser / with derivatives from adjs used as primaries in foreigner, Britisher, westerner, northerner, southerner. In regional AE are also found such words as Dutcher, Frencher, Irisher, Welsher (ADD).

We are reminded of the German type Berliner which is, however, of different origin. It goes back to cbs with -vartiō 'people' for a second word, the latter having developed into -er (cp. Kluge DW 40/41 and Wi 221. A. 2).

The sf is only tacked on to names of English-speaking and Germanic countries.

4.30.22. The type steamer 'steamboat' is the same as the preceding types formally. The sf stands for a sb denoting a thing. Exs are chiefly words denoting ships, as lighter 1487, coater 1574, cruiser 1679, smuggler 1799, sealer, slaver, steamer, trawler, spouter 'whaling vessel', wrecker, freighter, liner (19th
c.), tanker, oiler (20th c.). From the railway sphere are sleeper, smoker, diner. Part of the words are derived from a verbal basis, as cruiser, trawler, spouler, sleeper, smoker, diner, lighter (fr. light ‘unload a ship’) formed like words of the type sleeper.

Noser ‘strong head wind’ and souther ‘south wind’ are instances of a pretty weak semantic type.

4. 30. 23. Type fiver. The sf is tacked on to numerals with the same basic meaning of appurtenance. A fiver is someone or something belonging to the number five. The sf is, as in the two preceding groups, short for a word. With the type word and tenner, the key is usually dollars or pounds, but it may also be almost anything else: one of a body of (sixteen), a youth of (sixteen), a hit of (thirteen, five) etc. Exs are thirteener 1762, sixteener 1801, fourteener 1829 ‘a line of 14 syllables’, oner ‘unique specimen’ 1840, fiver 1853, tenner 1861, sixer 1870. The type is more recent and weaker than the corresponding German type (Dreier, Vierer, Sechser, Zehner etc., s. KLEW s.v. Dreier; G coinages are as old as MHG).

4. 30. 24. The sf is frequently tacked on to compounds and syntactic phrases. The chief types are weekender/old-timer/four-wheeler. Exs are (many of them AE) night-lifer, carpetbagger, sandbagger, honeymooner, pigtailer, bobby-soxer, teen-ager, party-liner, bottlenecker, Scotland-Yarder/midnighter, middle-ager, backbencher, back-hander ‘blow’, left-winger, left-hander, underworlder, inner-circle, low-incomer, first-nighter, first-termer. fourth-grader/two-seater ‘car’, six-pounder, ten-pounder (cannons), two-decker, three-decker (ships), eight-incher ‘eight inch point collar’.

Derivatives from various other syntactic phrases are stand-patter AE (f. political slang term stand pat), go-getter, stump-jumper AE ‘countryman’, do-gooder AE, rank-and-filer, etc. In the New Republic (1948, Feb. 2, p. 8) I read Hoover, the No. 1 Germany-firster.


Note: The idea ‘belonging to’ has also helped to form widower. A widower is a man who, typically speaking, belongs to a widow. But it may also be that -er is simply a masculine ending.

4. 30. 25. In many cases, -er has spelling variants in -ar, -or, which originally are not related to our suffix. Phonetic identity and the sameness of function established the connection. That the different spellings are really felt to be the same suffix, is also obvious from the fact that verbs are backderived from suffixed nouns in the same way. Spelling variants in -ar are chiefly Latinizing 16th and 17th c. refashioned older forms in -er, -or. Examples are beggar 1225 (various spellings, -ar since the 17th c.), liar 1290 (-ar 17th c.), pedlar 14th c. (-ar 16th c., note the Am. spelling peddler), burglar 1516, bursar 1567. Compare with the foregoing words burse, beg, lie, peddle, burgle AE. On the other hand, northern British dialects have often -ar where StE has -er, as in forbear ‘predecessor’; see OED -ar³. Variants in -or are sailor 1642, orig. sailor LME,
4. 30. 26. Original loans from French (ending in -ier, -oir, -oir) which had a verb or a suffixless noun to go with, naturally came to be felt as derivatives. Examples are: farmer, jeweller, gardener | miner, commander | dress, counter.

On the other hand, classical influence produced a certain counter-action in the 16th and 17th c. insofar as -er words received a Latinizing spelling in -ar or -or (see the examples above). There are thus two opposite currents: one is to assimilate foreign elements to the native -er, and the other to introduce a learned or pseudo-learned element. The latter is responsible for the frequent AE pronunciation [o(r)] in creator, actor a.o.

Latin-coined words in -ator also contain the sf -er for the present-day linguistic feeling. Their stress is dictated by that of the underlying verb in -ate: générater|générator, originater|originator. Between 1550 and 1750 the stress was often on the penult, after the Latin accentuation (see B. Danielsson 137—142).

4. 31. -erel, -rel |erel, rel/

is of somewhat doubtful origin. Apparently it originated in loans from French such as mackerel 1300 (fish) and kestre|l 'small hawk' 14.. (if it represents OF cresserelle) from which -rel, -rel split off though the words were not analysable as root and sf (cf. for a similar origin words in -cade and -athon, also -eria). The earliest rec. word is pickerel (spelled pykerell) 'young pike' 1338 which thus joined mackerel. Other names of animals the sf has formed are cockerel 'young cock' 1440, mongrel 1486 (f. root meng, mong 'mix', the earliest form is mengrel), hoggerel, hogrel 1530 'young sheep of the second year' (f. hog 'sheep of a certain age').

There are also a few disparaging words denoting persons, as dial. gangrel 'vagabond' 1530 (f. sb gang), obs. bedrel 'bedridden p.' 1513 (f. bed, perh. as opp. to gang), obs. dummyrel 1592 'dumb p., dummy', fondrel 'simpleton' f. fond, deverbal dotterel 1440 'dotard'. Scoundrel 1589 has the derogatory character of the group, but its etymology is unknown. Of unknown etymology are also a few Scottish words, as obs. ketterel 'vile wretch' 1572—1585, gamphrel 1728 = gomerel 1814 'fool, simpleton', haverel 1774 'one who talks nonsense'. For other obs. examples see Rotzoll 37—40.

Wastrel as applied to persons is quite modern (first rec. 1847), the original meaning is 'tract of waste land' 1589.

In StE the sf has been unproductive since about 1600.

4. 32. 1. -ery, -ry |eri, ri/

originated with French words in -erie (G -erei has a similar origin). It forms concrete and abstract sbs from substantives. The principal semantic groups are today: 1) a collectivity of persons (type yeomanry), 2) things taken collectively (type jewelry), 3) acting, behavior (esp. undesirably) characteristic of . . . (type treachery), 4) place which is connected with . . . (types tannery /
swannery). With the exception of swannery, all the types are French. Examples of loans are ancestry 1330 (1), robbery 1200 (3), treachery 1225 (3), jugglery 1300 (3), ribaldry 13... (3), sophistry 1340 (3), averwy 1330 ‘function of an avowe (‘patron’), tenantry 1384 (3, 4). For nunnerie 1275 no French pattern appears to be recorded, OF jueulerie is not quoted before 1434 in Godefroy whereas E jewelry occurs at the beginning of the 14th c. The absence of French counterparts is no strict proof of their non-existence, but it may also be that the English words are independent coinages. The word husbandry is first recorded 1290 which shows that the sf was by that time an established formative (Gadde op. cit. footnote 71, p. 22 assumes AF origin). On the other hand, French words continued to be borrowed, which often makes it impossible to decide whether a word is an English derivative or a loan from French. Gadde (28—31) considers several early words (as buggery and harlotry) to be loans.

4.32. 2. F -erie is the result of a secreational process: -ie (f. L -ia f. G -ia) when tacked on to agent nouns in -ier became -erie (as in chevalerie, sellerie, archerie etc.). From French loans the English sf sprang in the following way: on the one hand, English borrowed word pairs such as robber/robbery, juggler/jugglery, carpenter/carpentry, treacher/treachery where, historically speaking, the sf is merely -y. In French, as early as the 12th c. (see Ny 393), the sf was apprehended as -erie which explains the borrowed English pairs sophist/sophistry, mason/masonry, ribald/ribaldry, jew/jewry, spice/spicery. Derivation in English has accordingly been made either after the pattern carpenter/carpentry (i.e. -ery understood as matching agential -er), or spice/spicery (i.e. -ery directly tacked to a root). In the neutral sense ‘state, condition, practice of ...’ we have it in the loans mastery 1225, in aldermanry (in the ML form aldermaneria once rec. 1229, in its English form not before 1502, acc. to OED), jugglery 1300, masonry (second half of the 14th c.), archery 1400, cutlery 1449. The first Ec of the group is husbandry ‘business of a husbandman’ 1290. In this group, the use of the sf was favored by Anglo-French -erie and Anglo-Latin -aria, -eria in law terms such as aldermaneria, utlagerie/utlagaria ‘outlawry’ after which husbandry seems to have been coined. Nursery 1387 ‘up-bringing, nursing’ is perh. refashioned obs. nouricery 1330 (for both no pattern is recorded). Husbandry attracted housewifery 1440. Later are tannery 14.., barbery 1540, saddlery 1449, smithery 1625, joinery 1678, turnery 1644 ‘craft, art of ...’, rivalry 1598 ‘competition’, merchanty 1789 ‘business of a. m.’. But from the 14th c. on, the most frequent coinages are words with a deprecative tinge: buggery ‘heresy, sodomy’ 1330 (obviously an Ec), obs. jasper ‘ribaldry, trickery’ 1340, harlotry 1325, devilry 1375, bawdry 1854 ‘business of a bawd, procurer’, boggary (14th c.), papistry, heathenry, popery, slavery, knavery, thievry, rogery, savagery, foolery, wagery, drudgery, witchery, wizardry, obs. bitchery ‘harlotry’ (16th c.), doggery, bigotry, pedantry, buffoonery, whiggery (17th c.), quackery, casuistry (18th c.), trickery, jesuitry, snobbery (19th c.), banditry 1922. Other words can be derived freely, as cuckoldry, charlatanry, tomfoolery, puffery ‘puffing publicity’ etc. Knight-errantry 1654 may, but need not be, deprecative.

Derivatives from professional sbs in -ist are devoid of the disparaging tinge, as palmistry ME, chemistry 1600, dentistry 17... , artistry 1868, punditry 1926.
4.32.3. The collective sense of personal sbs sprang from loans such as *ancestry* 1330, *jewry* 1330 H. After the pattern have been coined *yeomanry* 1375, *Irishry* 1375 ‘the native Irish’, as opposed to ‘English settlers in Ireland’ which were called the *Englischry* (1470), *Danishry* 1470, *Welshry* 1603, *archery* 1465 H, *peasantry* 1553, *soldiery* 1570, *tenantry* 1628, *husbandry* (obs. in this sense) 1675, *masonry* 1686, *citzenry* 1819, *merchantry* 1862 H, *press-agentry*.

4.32.4. The type *jewelry* is the counterpart of the preceding group type *yeomanry*. A loan from OF is *spicery* 1297 (OF *espicerie*) ‘spices collectively’. A little later is *jewelry* 13... (the French word *juelerie* is first rec. 1434). These words are doubly connected, with *spice*, *jewel* and (obs.) *spicer*, *jeweller*, so *spicery*, *jewelry* may be understood as ‘spices, jewels collectively’ or ‘ware of the spicer, jeweller’. Such words have also been formed where only the second analysis is possible (as *carpentry*; *carpenter* is not further analysable in English) or the first one (as *finery*; there is no agent sb *finer*). The meaning of words of this group is thus ‘concrete things connected with what is denoted by the agent sb or the ultimate root’. Exs are *husbandry* 1386 ‘household goods’, after it *housewifery* (sense obs.) 1552, *carpentry* 1555 H, *farmery* 1656 ‘buildings, yards etc.’ (BE only). Chiefly from about 1600 on we find words with the meaning ‘ware’, as *coovery* 1558, *chandlery* 1601, *cutlery* 1624 H, *stitchery* 1607, *crockery* 1719, *stationery* 1717, *ironmongery* 1711, *confectionery* 1769, *pottery* 1785 H, *toggery* 1812 ‘clothes’ (f. *tog*, sl), *vinery* 1883, *lacyr* 1893. Cp. also *legendsry* 1849 ‘legends collectively’. Other collective nouns derived from sbs denoting things are *pageantry* 1608 ‘pageants (i.e. scenes) collectively’, *machinery* 1687, *scenery* 1748, *bookery* 1822, *blazonry* 1622. Not derived from sbs are *ancientries* 1866 ‘antiquities’ (perh. after antiquities), *finery* 1850, in sense after bravery ‘finery’ 1563 (app. f. vb brave ‘swagger, dress finely’), *greenery* 1797.

4.32.5. Old and very strong today, esp. in AE, is the type tannery ‘place where a tanner works; place where tanning is done’. Words of this group are doubly connected, with the basic sb resp. verb as well as with the agent noun. Exs are *nummery* 1275, *spicery* 1297 (= OF *espicerie*), *vintry* 1397 (f. obs. *vinier* ‘vintner’), *nursery* 1499 H, *ropery* 1363, *skinnery* 1480, *tracery* 1464 ‘place for tracing, drawing’ (obs.), *wafery* 1455 ‘place where wafers are baked’, *pottery* 1483 (perh. orig. = F *poterie*), *chandlery* 1601, *boilery* 1628, *brewery* 1658, *soapery* 1674, *fishery* 1677, *printery* 1638, *tannery* 1736 H, *tinneries* 1769, *smithery* 1755 H, *grocery* 1791, *nailery* 1798. 19th c. are *bindery*, *bakery*, *grindery*, *hatchery*, *tilery*, *vinery*, *rettery*, *smelltery*, *growlery*, *snuggery*. Mencken AL, Spl. I. 348—350 quotes *cannery*, *creamery*, *groggery* and from the 20th c. *cobbler*, *renewery*, *shoe-fixery*, *lunchery* etc. Most are nonce-words.

4.32.6. Type *swannery* ‘place where swans are kept’. Exs are *heronry* 1603, *swannery* 1754, *swinery* 1778, *goosery*, *hemmery*, *hoggery*, *owlery*, *pidgeonery*, *minkery*, *piggery*, *rookery*, *aperity* (19th c.), *cattery*, *rabbity* a.o. (20th c., q. Mencken op. cit.).

Parallel is the type *grapery* ‘place where grapes are cultivated’. Exs are *pinery* 1768, *shrubbery* 1748, *rosery* 1864.

Derivatives were originally made from sbs. But as derivatives from agent nouns were naturally ambivalent, they came to be analysed as connected with
the ultimate root if the word existed. On the other hand, as the ultimate root could in many cases be interpreted both as vb and as sb, deverbal as well as denomial derivation has become established. Robbery, printery, bindery, brewery, smeltery a.o. are intimately connected with the underlying verbs, and part of them were prob. coined as deverbal derivatives. The majority of coin-
ings have, however, remained within the original denomial boundaries, and recent American words such as cakery, sweetery, beanery can only be analysed as denomial derivatives.

4. 32. 7. Formally, we have four derivative patterns: carpentry fr. carpenter (i.e. derivatives from unanalysable agent substantives); printery fr. printer and print; popery fr. pope; and greenery fr. green.

4. 32. 8. As for the distribution of the allomorphs -ry and -ery, it appears to be dictated by a tendency to derive proparoxytonic words. We observe that, in accordance with this tendency, paroxytonic words add -ry as in jewelry fr. jewel: agentry, banditry, cuckoldry, heathenry, housewifery, husbandry, harlotry, ribaldry. When the basis ends in -er, its final r is dropped, as in printery fr. printer: archery, saddlery, jugglery, smeltery. Monosyllables add -ery: finery, greenery, pinery, scenery, thievery; machinery joins the group on account of its oxytonic stress. When the basis is already proparoxytonic, only -ry is added (the final r of a basis is dropped): casuistry, charlatanry, citizenry, jesuitry; chancellery, confectionery, stationery (but words in [to(r)] derive tri-

syllables in -try: ancestry, carpentry).

The only exception to the stressing tendencies which have just been stated is jewry. Other words which do not conform are derivatively unconnected. Avowry is an archaic word whose basis avow sb is not current now, nor will most present-day speakers connect bawdry with bawd. Monomes (unanalysable units) are also dowry, foundry, laundry, pantry, vestry, vintry. The stressing tendency does not seem to be older than the 18th century. Till then, forms like bawdry, Englishery, jewellery (with four syllables) were also in use.

Deviltry 1825 has its t from such words as harlotry and jesuitry.

4. 32. 9. Except with the t. printery/printer, -y has not become productive as an independent sf, though there are a few deverbal coinages. It was perch. after the pattern of such pairs as flattery 1320/flatter 1340, embroidery 1393/embroider 14.. that enquery 1440 was derived from enquere (the final -e was no longer pronounced). It was subsequently latinatingly refashioned into inquiry (alongside of inquire, after L inquirere) and attracted the rime word expiry 1752 (f. expire). Treaty/treat attracted entreaty 1523 (f. entreat).

Structurally speaking we have the alternation zero/-y also in loans from Greek, such as dynasty/dynast, monarchy/monarch, and in loans from French such as barony/baron, felony/felon, villainy/villain, honesty/honest, jealousy/jealous, but in neither case have English coinages developed.

4. 33. -ésé /iz/

As to the origin of the sf, the OED says that it is ‘ad. OF -éis (mod. -ois, -ais)’ I very much doubt the correctness of this etymology. OF -éis had developed into -ois before the English words in -ésé came into existence.
Final -s had long been dropped. E -esse is due to It -esse (f. L -ensem), denoting one belonging to a place. English borrowed Milanese 1484, Genoese 1553, Chinese 1577, Portuguse 1586 (or f. Port. Portuguez, as the OED supposes), Maltese 1615, Genevese 1650, Tyrolese 1809, Viennese 1839. On the other hand, such loans as Japanese 1604, Chinese 1644, Javanese 1704 paved the way for derivatives from other remote foreign countries, chiefly such of the Far East, as Annamese, Burmese, Ceylonese (the original form was Cingalese 1613, acc. to OED, repr. native sinhala which would suggest that -esse in this group is partly of native origin), Faroese, Nepalese, Pékinese, Sudanese, Senegalese, Singalese, Vietnamese. All these words denote the inhabitant as well as the language of the respective foreign countries, and the tinge of strangeness and striking originality which these words evoke, helped to coin words denoting a strangely peculiar style, a negatively characteristic jargon. The earliest recorded word is Johnsenese 1843, followed by Carlylesque 1858, journalese 1882 and recent coinages such as novelesque, telegraphese, jargonese, cablese, officialese, New Yorkese, Americanae.

The deprecative tinge originating in the group of the type Japanese recalls the antiquated German words Japanese and Albanese, conveying a disparaging tinge now, while Chinese has not been affected. The first two words have been replaced in serious use by Japaner, Albaner.

4.34. -esque /esk/

Forms adjs with the meaning 'having the (artistic, bizarre, picturesque) style of ...'. It developed out of French loans such as grotesque 1561, arabesque 1656, moresque 1611 'moorish in style or ornament', romanesque 1715. The word picturesque 1703, a refashioning of F pittoresque, characterizes the whole semantic field of the sf. Exs of English coinages are Dantesque, Rembrandtesque, Turneresque, blottesque (19th c.), carnivalesque is somewhat older (1791). In recent usage the type is quite frequent: we find lawyeresque, teacheresque (both T. S. Stribling, Unfinished Cathedral); esp. with derivatives from proper names, as Garboesque, Hemingwaysque, Kiplingesque. They are said by Zandvoort (English Studies 26.149) to be complimentary, but the implication proper is that given above.


4.35.1. -ess /es, es/

Forms feminine sbs parallel to masculine personal sbs. Its ultimate source is Gr -issa which in ecclesiastical words such as diaconissa (f. diacon) passed into ecclesiastical Latin. Many other words were coined in Latin and the Romance languages. From Old French, English borrowed a great many words, such as adulteress, countess, princess, patroness, hostess, traitress, tormentress, to cite only a few analysable words. As early as the 14th c. -ess was an established formative, not only with words of Romance origin, but it was also appendable
to native words. ME coinages are *friendless, dwellerness, neighboress* (no longer used), *wolfess, herdess, shepherdess, huntress, teacheress / juweess, authoress*. Later are *archeress, canoness, ambassadoress, ancestress, laundress, murderess, poetess, popess* (papess 1620 is F papesse), *temptress, tyranneness, votaress = votress, vowess 'nun' (16th c.), dragoness, farmeress, heireess, jesuitess, jointress 'widow who holds a jointure' = jointuress, ministress 'woman who ministers', mooress, peereess, piestess, spinstress, orig. 'female spinster = spinner', stewardess, sultaness, taleoress, tigress (perh. F. tigresse), tutoress, vicaress, orig. 'sister ranking immediately below the abbess', later 'wife of a vicar' (17th c.), dictatress, editress, legislatress, presidentess, procuress, manageress, citizeness, inquisitress (18th c.), millionairess, seductress, squireess, visitress, waitress, wardress (19th c.).

4.35.2. Formally there are several derivational patterns: 1) t. *patroness* f. *patron*. The sf is simply tacked on to the masculine counterpart. This is the original pattern. It is followed by all words except those which have a masculine counterpart in -tor, -ter, -der, -ster, -erer. Exs are *authoress, tailoress, heireess, herdess* etc. 2) t. *dictatress* f. *dictator*. The elision of the *r* is not original. *Enchanteress 1374 (= OF *enchanteresse*) was for centuries the only form, *porteress 1407, hunteress 1386* show the now usual elided forms from about 1500 only. The present-day pattern becomes established in the 16th c., very probably under the influence of Latin (and French). These feminine sbs were directly connected with *L -triz* and *F -trize* (note that there was only a small difference in pronunciation between *F -trice* and *E -tress*). Masculine sbs ending in -ster and -der are treated in the same way as those in -tor, -ter. Exs are *editress, ministress, inquisitress / ambassadress, laundress, wardress, commandress / seamstress, songstress*. 3) t. *murderess* f. *murderer*. It is perh. owing to euphonic reasons that the clumsy pattern *-*ereress was reduced to -ress. The earliest recorded word is *conqueress 1400*, followed by *cateress 1634, fruiteress 1713, adventurress 1754*. *Adulteress* (in this form since 17th c., in F form *avoutrresse 1370*) is now felt to be connected with *adulterer*, sorceress with sorcerer although sorceress 1384 are orig. regularly derived f. the now obs. sorcer 'sorcerer' 14th c. (sorcerer is first rec. 1526) and adulter 1384 respectively. 4) t. *procuress* f. *procurer*. The type is weak. On the analogy of such words as *conqueress 1400, governness* 1483 (replacing governeress 1366 which repr. OF gouverneresse), which can be analysed as derived from the respective verbs conquer and govern, a few deverbal sbs have been coined, as *vowess 1506, procuress 1712, entertainess, instructess, confectioness* (17th c.). In the 17th c., murderess and cateress were perh. also felt as deverbal derivatives.

4.35.3. In most cases, the -*ess* words denote female agents. Sometimes the wife of the male agent is denoted by the -*ess* word, as in *farmeress, presidentess, sultaness*. In general, however, not many of the -*ess* words are currently used. A teacher, poet, singer may be of either sex, and when a distinction is considered necessary, *woman* or *lady* are employed as first-words (*woman writer, lady doctor* etc.). Cf. also recent -*ette* in American English. Common are *countess, stewardess, wairess, wardress, actress, hostess, heireess, millionairess* and perh. a few others

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1 Mamie J. Meredith ASp 27 (1952) 224—225; MeAL, Spl. I, 589—591. M. has nearly 100 exs.
4.35. 4. The loans lioness and tigress have not attracted any other coinages. This is partly due to the general absence of the category ‘gender’ with nouns in English, which characterizes all stages of the language: OE -en was weak, he-, she- have gained restricted currency only, -ster was prob. never a feminine sf proper, -ette is quite recent and not strong, the range of -ess has just been discussed. There has never been any strong formative comparable to G -in which is used for persons as well as animals. If the distinction of gender is unnecessary for persons, it is still more so with animals. The use of the sf -ess was certainly not ‘what one might have thought its most natural purpose’ (H. Bradley, The Making of English, p. 58). For most animals with which the farmer, hunter etc. are familiar there have always been individual words. The male and the female of a species are not seen as relational things, not as pairs, so bull, boar, ram, dog, buck, stag, cock, stallion are, linguistically speaking, not counterparts of cow, sow, ewe, bitch, doe, hind, hen, mare but are coined as denoting individuals with distinct functions. An additional reason is perhaps that -ess had a literary character which made it unfit to be used with words denoting animals. In the ME period, there was only lioness (1300), while tigress is much later (1611). She- had become established as early as the 14th c. As it was a native and therefore a popular formative from the outset, there was little chance of its being ousted by any such learned, foreign formative as the sf -ess.

4.36. 1. -et /ôt, it/¹

has two sources. The one is F -et, in some cases -ette. OED, Rotzoll, Koziol and Jespersen, in the treatment of sf -et, speak of F -et, -ette only as the origin of the English sf. But there is also the -et we find in thicket (= OE þiccat) f. thick, OE rýmet ‘space’ (f. rúm ‘room, space’), OE emnet ‘plain’ (f. emm = efen ‘even’), prob. also hornet (= OE hyrnet, hyrnetu) f. horn, after which the word has been refashioned, grovet ‘little grove’, hoppet ‘enclosure’ f. OE hop ‘enclosed land’.

4.36. 2. From French, the language borrowed words such as banneret, billet, flasquet, floweret, riveret, tablet, analysable as suffix formations from simple words. Others such as bullet, plummet, turret, pocket, sonnet had no simple counterparts, so the explanation of the OED (s.v. -et) about the ‘original diminutive sense’ of these words is misleading. Floweret is refashioned after flower (the original is OF florete), flasquet after flask (the original is OF flasquet). French -et (the French sf is hardly productive any longer, despite isolated wagonnet 1872) had partly diminutive, partly merely individualizing force. In English, the sf -et has not become very productive (see Rotzoll 118—130); moreover, it is in most cases “a formative with diminutive sense” (Jesp. VI. 24. 61).

Diminutive exs are chainet (once in 1623), broocket (1538—1610), hogget, hoggit 1538 ‘a yearling sheep’, pooket 1554 (now dial.), obs. feveret 1712 ‘slight fever’, riflet 1538 ‘small rill or rivulet’, prob. apprehended as containing -let

¹ E. Rotzoll, Die Deminutivbildungen im Neuenglischen. Heidelberg 1910 (= Anglistische Forschungen 31), 131—165.
and coined after riveret, like brooket and freshet 1596 ‘stream of fresh water; overflowing of a stream’ (but note that there is no diminutive nuance in freshet), locket ‘little case’ 1679 (f. lock, not ‘ad. OF. loquet’, OED), squiret 1838, midget 1865 (f. midge 1796 H in same sense, i.e. the sf is intensifying). Such words as owlet, smilet (Sh), pearlet contain -let for the speech feeling. Buzzardet 1874 ‘hawk-like buzzard’, with the sf denoting approximation, may belong here. In spinneret 1826 ‘silk-producing organ of insects’ and swimmeret 1840 ‘swimming-foot of a crustacean’ the sf is individualizing rather than diminutive. Cellaret 1806 is an -et formation for the eye only, as the pronunciation [sɛlɛ'ret] shows. The spelling is prob. after cabinet, otherwise the word is connected with sf -ette.

4.36.3. A particular case are sippet 1530 ‘small piece of bread served in soup or broth’ etc. and smicket 1685 (now dial.) ‘small smock’. They are derived from sop resp. smock, i.e. the idea of smallness is expressed doubly, by the symbolic vowel i and the sf.

4.36.4. The line of native -et is continued by tacket 1316 (now dial.) ‘nail’, fr. tack 13., tippet 1300 ‘narrow slip of cloth forming part of the hood or headdress’, fr. tip or top (the sf caused mutation, as the exs above show; the OED terms the word ‘of uncertain origin’), but in later words the sf may represent native as well as French -et: tucket 1593 ‘flourish on a trumpet’ fr. tuck, carcanet 1530 ‘collar’ fr. carcan in same sense, lappet 1573 ‘part of a garment’ fr. lap in same sense, ledget 1805 ‘projecting piece’ fr. ledge ‘transverse bar’ etc. After the loan drucket 1580 (= F droquet) ‘a woollen stuff’ etc. were formed drabbet 1851 ‘drab twilled linen’ fr. drab ‘kind of cloth’, lacet 1832 ‘kind of lace’ fr. lace, bobinnet 1832; the loan doublet 1326 attracted singlet 1746 ‘unlined woollen garment’. Snippet 1664 ‘small piece cut off’ is prob. fr. snip sb 1558 in same sense (not fr. snip vb, as the OED has it; -et has not formed deverbal derivatives).

4.36.5. The following words are prob. loans from French: target 1400 (F tarquette; as a derivative from targe, pron. [ta(r)dʒ] it would be pronounced with a [dʒ], not with a [g]), obs. cushionet 1542, lionet 1586, packet 1530, planchet 1611 though they may, of course, be English derivatives, too.

There are many words of uncertain etymology, as basket, casket, hoppet ‘basket’ (bucket appears to repr. OF bakket in same sense), gadget, skilet ‘cooking utensil’, mugget ‘intestines of a sheep’, strumpet, trinket, whippet a.o.

4.37.1. -ette /et/

represents the French diminutive sf -ette, as in the loan mountainette 1586 (= F montagnet), orig. in the form mountainet, E -et representing both -ette and -et (see sf -et). The spelling -ette is 19th c. This applies to other loans also, as collarette (in this form 1869, earlier in French form collerette 1690), bannerette (1884, orig. banneret 1300, the OF form -ette being rendered by -et), chemisette 1807. The sf became productive in the 19th c. with words such as novelette, leaderette ‘short editorial paragraph’, sermonette (common in USA), balconette, stationette.
IV. Suffixation

4.37.2. Recent AE are *kitchenette, dinette* 'small dining-room' (clipped form of *dining-room* plus *sf*), *roomette* (on trains), *shumberette* (the equivalent on planes of a roomette, thus formally a clipping of *slumber (room-)ette*). *Luncheonette* is first recorded in the sense of 'light luncheon', but is now common only with the meaning 'place were one has lunch, chiefly at the counter'. Perhaps this meaning arose from the use of *Luncheonette* as the proper name of some place were light luncheons were offered, subsequently becoming a common sb. Other words of the type have not, however, been formed, with the exception perhaps of the somewhat irregularly formed *laundrette*, used in some cities for *laundromat* 'laundring place'.

Many other coinages are more or less nonce-words, such as *articlette, storyette, essayette, dinnerette* (see MEAL 4 Spl. I 362) while the language of trade has created such words as *blousette, lobsterettes, sardinettes, autoette, pursette, partitionette*. *Wagonette* 1858 was coined with a view to the bigger size of a wagon, but is otherwise not analysable as its diminutive.

4.37.3. From the beginning of this century, *-ette* has become a tentative *sf* to denote female sex with personal sbs. The starting-point appears to be *suffragette* 1906 (after *suffragist* plus *-ette*). Recent is *undergraduette* 1920. Numerous new formations of this type are found in American English (see MEAL 4, Spl. I. 362 and J. Meredith in ASp 27. 74—76, 1952). An American word of the First World War was *yeomanette* 'woman doing clerical work for the Navy'. Many others have been tentatively coined, as *censorette, conductorrette, chaufferrete, farmerette, officerette, savoirette, tractorette*. While not all these have gained currency, a few are common now, as *majorette* (designating a girl in uniform marching at the head of the band), *rockette* 'chorus girl', *ushertime* 'a female usher'.

4.37.4. We have the *sf* with words denoting cloth. The present-day implication is 'imitation resembling . . . '; in words of which the root is not a cloth name the connotation is likewise that of 'imitation material, inferior stuff'. This is, however, a modern sense development, the diminutive nuance having led to that of 'approximation' (as in *buzzardet*, see *-et*). The earliest words do not even contain a diminutive sense but show the *sf* in an individualizing function. The oldest cloth name of the kind I have found is *camlet* 1400, early associated with *camel*. Later are obs. *burdet* 1710 'some kind of cotton' app. from *buld* (Alexander), a variant of *bord* Alexander 1392 'kind of striped silk', *persianet*, occurring in a quotation from the 'Female Tatler' 9/I (1709), *satinet, -ette* 1703, (see OED s.v. *satinette*), *toilinet, -ette* 1799 (fancifully derived fr. F *toile*), *muslinette* 1787, *flannelette* 1882, *leatherette* 1880, *cashmerette* 1886. In the same category belong *brusselette, georgette, cassinettes, dandizette* (after F *grisette* 'female dandy') of which the bases are not cloth names.

Though French also has cloth names in *-ette*, English *-ette* is an independent development. F *satinette*, for instance, is recorded from the end of the 19th c. only (see Bloch s.v. *satin*).

The spelling *-ette* is chiefly 19th c. For *muslinette* it is recorded as early as 1787, but *-et* occurs in the 19th c. still.

The *sf* has the main stress which definitely distinguishes it from *-et* of which it was originally a variant only.
4.38. *-fold /fold/*

is an adjectival (adverbial) sf with the same stem we have in the verb *fold*. It has cognates in other Germanic languages and is probably also related to OGr *haploos*, *haplos* = L *simplex*. The sf is tacked on to cardinal numerals and to adjs meaning ‘many’. The original sense is ‘folded in two, three etc.’ (cp. *a threefold rope*), but the chief function of *-fold* is to form multiplicatives with the meaning ‘... times, ... times as much or many’. Exs are twofold, threefold, fourfold etc. / *manifold, severalfold*.

The lower numerals are now strongly rivalled by double, triple etc. Obs with higher numerals occur chiefly in such phrases as *he has repaid me tenfold* (with *tenfold* used as tertiary) and *that is a thousandfold worse* (with *thousandfold* used as primary), see OED s.v. *-fold*.

4.39.1. *-ful /ful/* (type careful)

is originally identical with the adj *full*. It is tacked on to substantival and verbal stems, conveying the general meaning ‘full of ...’. In OE we find desubstantival derivatives only, as *awful, baleful, careful, rightful, sorrowful, sinful, wonderful*. ME are *cheerful, doubtful, faithful, fearful, fruitful, graceful, harmful, healthful, joyful, lawful, lifesful, manful, masterful, merciful, mindful, mirthful, needful, peaceful, powerful, restful, skillful, thoughtful, wishful, worshipful, wrathful*. Later are *spiteful 1440, pitiful 1449, useful 1483, wishful 1523, beautiful 1526, watchful 1548, delightful 1530, dutiful 1552, hopeful 1568, hurtful 1526, gainful 1555, trustful 1550, spleenful, successful 1588, tearful 1586, faultful 1591, senseful 1591, truthful 1596, toilful 1596, remorseful 1591, respectful 1598, eventful, tasteful, hasteful, artful, wishful, resentful (17th c., chiefly the first two decades). There appear to be very few words coined after the 17th c. (with the seeming exception of negative words from the next group, which are, however, prefix formations of *un-* adjs), as *taleful* (Thomson only), *speechful 1842, soulful 1863, tactful 1864*. Derivation from words of French origin was common by 1300. We find *joyful 1290, fruitful 1300, merciful 1300, peaceful 1300, pitiful (ly) 1303, guiltful 13...*, *masterful 13...*, *doubtful 1388, cheerful 1400, graceful 1420, powerful 1400—1450*.

4.39.2. The following is a list of adjs prefixed by *un-*. Some are recorded earlier than their positive counterparts, as *unbeautiful 1495 (b. 1526), unhopeful 1450 (b. 1568)*. The earliest coinages I have found are *unmindful 1382, unfruitful 1388*. Later are *unartful, unboastful, uncareful, uncheerful, undelightful, undoubtful, undutiful, uneventful, unfaithful, unfearyful, ungainful, ungraceful, ungrateful, unharmful, unhealthful, unhedful, unhelpful, unhurtful, unjoyful, unlawful, unmerciful, unmirthful, unneedful, unpeaceful, unpitiful, unpowerful, unremorseful, unreprouchful, unresentful, unrestful, unrightful, unskillful, unsuccessful, untactful, unhankful, unthoughtful, untruthful, unuseful, unwatchful, unwilful, unwishful, unworshipful* (see also 4.61.3—4).

4.39.3. A few derivatives from verbal bases have been made, as *forgetful* ME, *weariful 1454* (or from the adj), *bashful 1548, wakeful 1549, mournful 1542 fretful 1593, assistful 1600, changeful 1606, neglectful 1624, resistful 1614, refreshful 1637, resentful 1656*. The meaning is ‘apt to ...’ (*bashful* has passive meaning).
4. 39. 4. The sf is not a formative with adjectival bases, though there are a few out of the way coinages: grateful 1552 is an extension of obs. grate 'grateful' (= L gratus), influenced by thankful. There is direful 1583 which may, however, be a derivative from sb dire. Obs. tristful and fierceful joined direful, being supported by dreadful. OE had an isolated deorful which was used to render L tenebrosus. Gladful, now archaic, which Jespersen (VI. 23. 2) treats as a dejectival derivative, is rather derived fr. obs. glad sb (OE — 1608).

4. 39. 5. As for the meaning in desubstantival derivatives, the original sense 'full of . . .' is more or less strongly contained in awful ('full of respect' 1593 H), respectful, sinful, wonderful, beautiful, changeful, cheerful, pushful, deceptful, thankful, hopeful, careful, heedful, graceful, spiteful, successful, meaningful a.o., originally also in artful, faithful, wilful, frightful, delightful, sorrowful, doubtful 'full of fear' (sense obs. now), shameful a.o. The shade of 'offering, displaying . . .' we find in fanciful, useful (use 'advantage'), helpful, gainful. Another nuance is that of 'causing, exciting, commanding . . .', contained in awful, fearful, dreadful, respectful 'commanding r.' (sense now obs.), delightful, wonderful, shameful, frightful. The sense 'marked by the characteristic of . . .' is in various shades contained in lawful, rightful, needful 'in conformity with need', manful, masterful. Several words belong to more than one sense group, as fearful, hateful, dreadful, hopeful, healthful, wonderful.

Brimful 'full to the brim' is sometimes pronounced with forestress. The more common and regular pronunciation is, however, that with two stresses, normal with composite adjs of type snow-white to which the word belongs.

4. 40. -ful /ful/ (type a mouthful)

is a recent suffix. The type originated in the syntactical group a mouth full (of soup) which is found in other Germanic languages, too. As far back as OE we find handful as a cpd with plural handfullis (q. from the 14th c.). As in ME it was customary to use the singular after numerals (e.g. two spoon), we cannot tell from a sb such as two spoon ful whether it was felt to be a cpd or a syntactic group. In MoE the plural -s is appended to the last element which isolates the combination morphologically. The meaning of the cbs is 'quantity which fills or would fill . . .'. Exs are bagful, boxful, bottleful, capful, cupful, canful, coachful, houseful, lungful, pipeful, plateful, spadeful, tubful a.o.

4. 41. 1. -hood /hōd/

is today a sf, but was like -dom an independent word in OE, hōd meaning 'state, rank, order, condition, character'. Cbs with hōd as a second-word were thus compounds in OE. The majority of coinings are desubstantival derivatives from a native word, though derivation from a non-native root is not infrequent.

From OE are recorded knighthood, childhood, wifehood, orig. 'womanhood', maidenhood, monkhood, bishophood, priesthood, widowhood, youthhood. ME are brotherhood, masterhood, Christhood, godhood, manhood, womanhood, sisterhood, fatherhood, fleshhood, neighbourhood. Later are motherhood, sainthood (16th c.), bodyhood, squirehood (17th c.), babyhood, boyhood, girlhood, widowerhood (18th c.), bachelorhood, ladyhood, lionhood, spinsterhood, orphanhood, parenthood (19th c.).
4.41. 2. Dejective derivatives have been recorded since the ME period. They are less numerous. Their meaning is ‘state of being . . .’, also ‘instance of . . .’. Exs are falsehood, likeliness (ME), lustihood, obs. liveliness (G 16th c.), hardihood 1634, gentlehood 1860. The type is no longer productive and has never been strong, in contradistinction to G -heit which at all times has chiefly formed dejective sbs (see Wi 289).

4.41. 3. The current meaning of derivatives is ‘status of . . .’, a major group are words for the general natural conditions of human life, as the exs show. Several words, as wifehood, widowhood, widowerhood denote civil states with legal rights and duties. Nationhood 1850 and statehood 1868 ‘status of . . .’ have joined this group.

With the nuance ‘time, period’ of the respective state occur childhood, babyhood, boyhood, girlhood. Other words may denote a concrete collective body, as manhood, maidenhood, ladyhood, brotherhood, sisterhood, priesthood, serfhood.

‘Nonce-words’ with meaning ‘status of . . .’ are pretty frequent. Exs are bearhood, cathood, doghood, duckhood, cubhood, tailhood, selfhood, I-hood a.o.

4.41. 4. The sf has an unexplained by-form -head (see OED), formerly in more frequent use, but today occurring in godhead ‘deity’, maidenhead ‘virginity’ lowkhead ‘humility’ (arch.) only.

Livelhood ‘means of living’ is a 16th c. refashioning of ME lifelood f. OE liflād ‘way of life’.

Baugh’s treatment of the suffix (p. 225) is unsatisfactory.

4.42. -iána /ɪˈeːnə, ɪˈænə, ɪˈænə/ is a sideline of -ian, as in Shakespearian, Wellingtonian, and is latinizingly tacked on to proper names, chiefly names of famous persons. The meaning it conveys is ‘notable sayings of . . .’, or ‘sayings, anecdotes, gossip, curious information concerning . . .’. Exs are Shakespeariana, Byroniana, Burnsiána, Johnsoniana, Walpoliana, Morrisiana, Wagneriana etc.

Not derived from personal names are Americana, Mexicana (not in -iana as the adj is in -an, too), anonymiana, omniana ‘information about everything’.

The origin is to be sought in the poetical Latin use of adjs in the neutre plural (Ciceronianá, Virgilliana) and, possibly, the influence of French where the type goes back to the 16th c. has played a part. An early English coinage is Scaligeriana 1666, but other words crop up in the 18th c. only.

The suffix, at one time, was so much in use that it became an independent word: ana (first rec. 1727).

As the sf is usually tacked on to proper names of persons, -iana is the regular form (as -ian is the regular sf for the adjs).

4.43. 1. -ie /ɪ/ represents L -icus (as in classicus, civicus, domesticus) and OGr -ikós (latinized as in comicus, criticus, poeticus), adjectival sfs denoting appurtenance. The first -ie words that make their appearance in English, come in through the medium of French (where -ique is one of the most productive adjectival
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sfs), and so far as loans are concerned the direct source of an English word is often difficult to ascertain. Words such as *ecliptic, economic* are either from French or from Latin direct.

4.43. 2. From about 1600 we have Ecs in *-ic,* chiefly scientific terms (wffb).

"In Chemistry, the suffix *-ic* is specially employed to form the names of oxygen acids and other compounds having a higher degree of oxidation than those whose names end in *-ous*" (OED s.v. *-ic*). Ecs are *cerebric, ceric, cerotic, chloric, clysmic, ferric, ferulic, formic.*

4.43. 3. The sf is used with derivatives from ethnic names, in imitation of Latin words such as *Germanicus, Gallicas, Celticus, Teutonicus, Lombardicus.* From the 17th c. are recorded *Germanic, Celtic, Teutonic, Lombardic, Finnish, Gallic,* without a Latin pattern *Icelandic* 1674. In modern use, *-ic* words used as primaries denote the language, with a pronounced scientific tinge. Ecs are *Turkic, Mongolic, Finnish, Ugric, Tungusic, Samoyedic, Icelandic, Greenlandic, Lettic, Arabic, Semitic, Ethiopic, Persic, Wendic* a.o.

After loans from Latin (such as *Platonic, Socratic*) have been formed (wffb) *Miltonic, Byronic, Cervantica, Anatropic* a.o.

Learned words (partly wffb, partly wfb) from various other domains are *domic* 'pertaining to a dome', *funic* 'pertaining to the umbilical cord' (L *funis*), *gentilic* (an extension of L *gentilis*), *lavatic* 'consisting of lava', *operatic* 'pert. to opera' (with the L sf *-aticus* fr. *sbs* in *-a*, op. *aquaticus, schematicus, dramaticus*), *bardic, skaldic* (from the 'field' of *poetic, lyric, harmonic*), *aldermanic* (attracted by other words in *-manic*, as *Germanic, Romanic*, *felspathic* (from the 'field' of *geographic, geologic, metallic*), *chivalric* (perh. after *heroic*), *oratoric* (after *rhetoric*), *goliardic, totemic, charlatanic, daemonic, harmonic* a.o.

4.43. 4. The stress is on the syllable preceding *-ic,* i.e. the words are formed on a Latin basis, coined as representing NL words in *-icus.* The word *chivalric* 1797, however, is usually stressed on the first syllable, on the analogy of *chivalrous.* There are a few more *-ic* words which are stressed on the antepenultimate, as *Arabic 1391, lunatic 1290, politic 1420, catholic 1425, heretic 1330, choleric 1340.* These words were taken from OF (though F *lunatique* is not rec. before the 14th c.), and OF words with more than one syllable before the stress had a rhythmic secondary stress which in English became the main stress. Otherwise there is a marked tendency to stress adjs in *-ic* on the penultimate. *Arithmetic* and *arsenic* are so stressed whereas the stress is on the antepenultimate when the words are sbs. *Phlegmatic, pleuritic, schismatic, splenetic* were at the end of the 18th c. still stressed on the antepenultimate (see Jesp. I. 5. 66). *Cadaveric* 1835 is usually stressed on the antepenult (homological stress), in AE always so.

See also *-ical* (under *-al*). For the stress history see B. Danielsson, pp. 162—187.

4.43. 5. Substantival derivatives from adjs in *-ic* are not only in *-icity* as the OED has it (s.v. *-ic* and *-icity*; cp. also the misleading statement: "Adjectives pertaining in sense to sbs. in *-ism* are formed in *-istic; e.g. atheism, atheistic; naturalism, naturalistic*," OED s.v. *-ism*), but many are in *-icism,* others following the correlative pattern *-ic/-ism.* The semantic differences
are determined by the character of -ity (denoting abstract quality) and -ism (chiefly 'condition, nature'; many terms from biology and physiology; 'system, attitude'). Cp. alcoholicity 'alcoholic quality', alcoholism 'diseased condition' etc. catholicity and catholicism (see sfs -ity and -ism). I will give exs for each type, but it will be noted that some -ic adjs have derivatives both in -icity and -ism.

atomic/atomicity, alcoholic/alcoholicity, catholic/catholicity, domestic/domesticity, eccentric/ eccentricity, electric/electricity, elastic/elasticity, historic/historicity, public/publicity, rustic/rusticity etc.

anthropomorphic/anthropomorphism, atavic/atavism, barbaric/barbarism, chemic/chemistry, egocentric/egocentrism, embolic/embolism, encyclopedic/encyclopedism, endomorphic/endomorphism, eugenic/eugenism, faradic/faradism, gigantic/gigantism, hedonic/hedonism, heroic/heroism etc. All adjs in -bolic (embolic, symbolic), -matic (astigmatic, rheumatic), in -tropic (isotropic, phototropic) follow the same type.

agnostic/agnosticism, catholic/catholicism, eclectic/eclecticism, sceptic/skepticism, stoic/stoicism, classic/classicism, romantic/romanticism denote systems and their respective followers.

4.43.6. The preceding alternations do not, however, exhaust the derivative patterns. From the point of view of structural analysis the derivative system of foreign-coined words in -ic is rather complex. Most of the words are ultimately Greek, and OGr -ikós was very prolific. Thus the adoption of countless Greek words and the coining of others after their derivational patterns has introduced the anomalous system of Greek morphology into English. Of the numerous alternations this involves for the problem of wf I will give some of the major correlative patterns only.

4.43.7. -y/-ic. Most words in -y (ultimately repr. OGr -ia) derive adjs in -ic. This concerns words in -amy, -graphy, -logy, -metry, -nomy, -scopy and many others. Exs of alternations are monogamy/monogamic, geography/geographic, philology/philologic, geometry/geometric, astronomy/astronomic, microscopy/microscopic etc. etc.

4.43.8. -ia/-ic. Most learned words in their NL form in -ia (ult. OGr -ia like preceding -y) derive adjs in -ic. Exs are anaemia/anaemic, hydrophobic/hydrophobic, analgesia/analgesic, amnesia/amnesic etc. But from -ia words there are other -ic derivatives beside: amnesia derives both amnesic and amnestic, diphtheria derives diphtheric, diphtheritic (and diphtherial).

4.43.9. -sis/-tic. Most (ultimately Greek) words in -sis (regularly so all words in -ysis) derive adjs in -tic. Exs are genesis/genetic, mimesis/mimetic, anabiosis/anabiotic, electrolysis/electrolytic etc. (but basis/basic).

4.43.10. -itis/-itic. Words in -itis (denoting diseases, chiefly of an inflammatory kind) regularly derive adjs in -itic. Exs are bronchitis/bronchitic, encephalitis/encephalitic, enteritis/enteritic.

4.43.11. -ite/-itic. Words in -ite regularly derive adjs in -itic. Exs are anthracite/anthracitic, dynamite/dynamitic, monophyse/monophysitic, parasite/parasitic.
4.43.12. -cracy/-cratic. Words in -cracy (ultimately repr. OGr -kratía which gave ML -cracia, OF -cracie whence E -cracy) are matched by adjs in -cratic (from adjs in -atique the corresponding sbs in -ate were back-derived in French, and the earliest -at words in English, aristocrat and democrat, are loans from French). Exs are aristocracy/aristocratic/aristocrat, democracy/ democratic/democrat, plutocracy/plutocratic/plutocrat, i.e. the adjs appear at the same time derived from the sbs in -at. The pattern has been extended to diplomacy/diplomatic/diplomat.

4.43.13. Words ultimately representing OGr words in -ma derive adjs in -matic. This concerns the types problem/problematic, epigram/epigrammatic, drama/dramatic. Exs are problem/problematic, axiom/axiomatic, emblem/emblematic, diaphragm/diaphragmatic. With regard to its origin (OGr aphirosis), aphoristic has irregularly entered the group.

epigram/epigrammatic, diagram/diagrammatic, chronogram/chronogrammatic, monogram/monogrammatic etc., but no words in which -gram has the connotation of 'message'.
drama/dramatic, aroma/aromatic, asthma/asthmatic, cinema/cinematic, dogma/dogmatic.

4.44.1. -ician /ɪˈʃi.ən/

is a sf with personal sbs, denoting one skilled in some art or science. In ME we have borrowings from OF such as physician c 1225, magician c 1384, musician c 1374, rhetorician 1425, logician 1475, mathematician 1432, orig. spelt -ien in the French way, in the 16th c. adapted to sf -ian. The word mathematician was followed by the Ecs geometrician 1483, arithmetician 1557, obs. algebrician (1579—1680), theologian 1560 (now rare). The loans in -icien were all matched by earlier loans ending in -ic, as physic, magic, music, rhetoric, logic, mathematic, denoting an art or science, which established the correlation -ician/-ic (resp. -ics). Exs of this correlative type are mechanician 1570, obstetrician 1828, rubrician 'one who studies liturgical rubrics' 1849, ethician 1889 (rare). Derivatives from -ic words of another kind are technician 1833 and clinician 1875. Academician is F académicien. The now obs. word simplician 'simpleton' (common c 1600—1650) is derived from the stem of simplic-ity.

4.44.2. The pattern -ician/-ic(s) is more common in its extension -tician/-tic(s). Exs are (beside the words quoted above) practician 1500, politician 1588, dialectician 1693 (need not be F dialecticien, OED), tactician 1798, elastician 1885 'one who is conversant with the science of elastic-ity', syntactician 1900 (after tactician), statistician 1825, phonetician 1848, theoretician 1886.

4.44.3. Recent American English has produced such irregularly coined words as mortician 'undertaker' (in use since about 1917, see MeAL4, 287), beautician 'one who runs a beauty parlor', cosmetician, asphalician, bootician 'bootlegger'. In several, -tician has become a quite independent element, not in line with the regular patterns. In Hollywood the word dialogician (as con-
nected with *dialogue*) is used (after *logician*). Dietician 1846 f. *diet* (under the influence of *physician*) is also orig. an Americanism.

F -icen represents an extension of L -ianus, i.e. -ianus appended to a stem in -ic, as if L -icianus. The only instance of an extended Latin basis in -icus appears to be L *patricius* which became *patricien* in French (14th c.) and was adapted as E *patrician* 1432 (first in Higden, spelt *patricion*).

4. 45. 1. -ie, -y /i/\(^1\)

is a hypocoristic sf, either tacked to the full noun (regularly so with common nouns) or to a shortened or endearingly modified form of a name, first or last name (*Charlie* f. *Charles*, *Bonny* f. *Bonaparte*). The original type is *Charlie* (sf with personal proper names) which in Scotch is recorded about 1450.

As for the origin of the sf, the OED explains it from names like *Davy, Mathy* which rendered OF *Davi, Mathé*, “which have the appearance of being pet forms of *David, Mathou*” (OED, s.v. *-y* suffix\(^6\)). ‘For whom?’ we naturally ask. When there was no sf and accordingly no possibility of hypocoristic interpretation of the final -y, the termination was hardly capable of being transferred to other names. Almost the same theory had been upheld before by Hőge (19—20). A paper by K. F. Sundén, valuable for its documentation, does not throw much light on the origin of the sf. According to S., the -y extension (originating in Scotch with personal names) had at first no hypocoristic touch at all, but arose as a mere onomastic extension form monomorphemic names — Old English (as *Wulsē* f. *Wulfsiȝe*), French (as *Aubry, Mary*), or Scandinavian (*Aki, Alli*). But extended names of the type *Charl-ie* “were not necessarily coined for endearing purposes” (163). It is not quite clear then how the hypocoristic function came into existence. S. thinks that such names as *Addy, Batty, Roby, Willi* received endearing force as “their correlative forms without -y also had this function” (164). But then, the argument we have raised against the explanation of OED comes up again. It is difficult to conceive of extension from words which were not analysable as two-morpheme words. Reinterpretation usually presupposes bi-morphemic character of a pattern (see 4. 1. 6—7). It seems to me much more probable that /i/ arose spontaneously as an expressively motivated morpheme whose symbolic value has been so brilliantly described by Jespersen. The English sf is parallel to G -i (not only used in Swiss German, as Jespersen thinks) in *Willi, Hansi, Uli, Pappi, Manmi* etc. for which no historical connection need be assumed. The vowel i has general symbolic value. Why the symbolic value of i came to life so late (not before 1400) is difficult to explain. A parallel case would be diminutive LL -ittus, -itta which is found in late Latin inscriptions only, while earlier stages show no trace of it.

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4. 45. 2. Pet forms of proper names are first found in Scotch. To the south they spread later. A few exs may suffice: Anny (Anne), Billy (William), Bobby (Robert), Bessy (Elisabeth), Davy (David), Dolly (Dorothy), Fanny (Frances), Georgie, Harry, Jacky, Jonny, Jimmy, Tommy, Reggie (Reginald) etc. etc. See also 'Clipping' 9. 2. 5. For the use of the sf with surnames see 9. 2. 6.

Pet names have frequently passed into the category of common sbs: kitty (Catherine) 'young girl' 1500, lowry (Laurence) 'fox' 1500, jockey (John and Jack) 1529 (in current sense 'professional rider' 1670), some more in Scotch (see Sundén p. 137), jenny (Janet, various senses) 1600, tony 'fool' 1654—1784, dolly (various senses) 1648, johnny 'chap' 1673, molly (Mary) 'wench, prostitute, effeminate man' 1719, jemmy (James) 1753 in various senses, also in form Jimmy, jerry (Jeremiah) 'hat, machine' 1841, peggy 'simpleton' 1869 a.o. See also 'Compounding'.

4. 45. 3. Hypocoristic derivatives from common sbs are more modern. The first word recorded is baby 1377 (f. babe). No others are found before 1500. Daddy (f. dad) is rec. 1500, later are mammy (f. mam) 1523, brownie 'kind goblin' 1513, laddie 1546, kiddie 1579, orig. 'young goat'. Noddy 1530 may be a nursery word for a doll that nods, following puppy 1486 'toy dog' which seems to be F poupee. Most of the words belong to the nursery, as we see. From the same sphere are dummy (f. dumb) 1598, grannie 1663. But the sf was also used outside the nursery domain; though perhaps in imitation of it: ninny 1593 (prob. in imitation of children's language, not 'f. innocent', OED), dearie 1681, mousy 1693, hubby 'husband' 1688. From the 18th c. are lassie, lovey, dovey, birdie, auntie, sweetie, titty 'nursery word for teat'. 19th c. and later are blokey, cooky, ducky, doggie, froggy, mannie, mummy, sissy (with depreciative shade, f. sister), slavey | blackie, darkie, fatty, meany, smarty, softy, toughie. The sf has a negative charge, so to speak, conveying a disparaging sense outside the endearing sphere where alone it is serious as to its emotional value. Cp. also 'Clipping' for clipped words to which the sf is tacked. Words containing the pet sf have never more than two syllables. As for the spelling, there are no strict rules. Certain tendencies may be observed for which the reader is referred to OED (s.v. -y suffixes).

4. 45. 4. Our sf has developed the by-form -sy. Regular in Bessy, Trixy, Chrissie, Elsie, -sy was appended to other names where it had no place by rights. We find it in Betsy, Tetsy (Elisabeth), Magsie (Margaret), Nancy (Anna), Timsie (Timothy), Patsy (Patrick).

It forms also common sbs such as boysie, chapsie, ducksy, mumsie, mopsy (f. mop 'woman', sl), and in geminated form kysics-wickysy 'woman' (Sh), and hotsie totsie 'pretty girl' AE, and such nursery words as tootsy-wootsies (f. foot) and popsy-wopsies 'children'.

4. 46. 1. /f/ or \f/ [fai, fa]/

is ultimately L -ificare, from the same root as facere 'make'. With the basic meaning 'make' it formed a few verbs in Classical Latin (the older type being -facere, as tepefacere, colefacere, patefacere), as aedificare, amplificare, magni-
ficare, pacificare, sacrificare, terrificare, more in Late Latin, as dulcificare, glorificare, purificare, rectificare, sanctificare, vitificare, and grew exceedingly frequent in Medieval and Modern Latin: quantificare, ratificare, certificare, verificare (ML), stratificare, electrificare (NL). Old French had many verbs of the type. Originally, these verbs ended in -ifier (whence EME words in -ify), but under the influence of Latin, -ifier became the established form. Except for a few words such as caleyf, liquefy, rubefy, satisfy, stultify, English loans from French ended in -ify, as amplify, certify, edity, glorify, modify, magnify, purify, rectify, sanctify, verify (all ME), and -ify has remained the form in which French verbs in -izer and Latin verbs in -ificare (occasionally in -facere also) were adapted.

4. 46. 2. 15th c. and later adaptations are pacify (L, F), vility 1450 (L), qualify 1540 (F, L), quantify 1840 (NL), stratify 1661 (NL), terrify 1575 (L, F terrifier is not rec. before 1795), dulcify 1599 (L, F dulcifier 1653), gratify 1540 (F, L), stultify 1766 (LL) etc. The common meaning of these verbs was 'make, convert into, bring into the state of...'. From the 16th c. on English has formed both desubstantival and deadjectival derivatives. The basis of coining is either Latin, as in carnify 'convert into flesh', chondrify 'turn into cartilage' (f. Gr chondros), or native, as in beautify, steelify etc.

4. 46. 3. From native sbs are derived beautify, fishify (16th c.), ladify, steelify, stonify, countrified (17th c.), chiefly used contemptuously since about 1700, with the implication 'make look like, give the (undesirable) appearance of...', as toryfy, whigify, speechify, monkeyfy (18th c.), cockneyf, whiskify, dandyf, stiltify (19th c.). Yankeef, negrof, russify, frenchify, turkify are not complimentary, nor is hornify 1607 in the obs. sense 'cuckold', though townify 1777 and citify 1883 have no such tinge. After speechify 1723 were formed argify 1751 and preachify 1775, with a facetious flavor. Airified 1864, as applied to style or manner, has a derogatory nuance, too. The word denazify, much used after World War II, may be quoted in this connection. Jespersen (VI. 25. 11/12) has exs like Shelleyfy, Swiftify, Popify with the same deprecative tinge. Being semi-scientific, the word trustify 1902 'convert into a trust', used in commercial slang, enters the learned group of words which is free from any disparaging or ridiculing tinge.

4. 46. 4. A few words have been coined as deadjectival derivatives, as uglify 1576, happify 1612 (now chiefly AE), hornify 1670 'make horny' (different fr. desubst. hornify 'cuckold'), daintify 1780, tipsify 1830, drowsify 1872, pretify 1850, with the same derogatory tinge as the prec. group.

Not Standard are such words as apexify, bullify, funkify (OED s.v. -fy), creepified 'creepy', faintified 'faint', fitted 'subject to fits', rainified 'rainy' (ADD), foostify a.o. (q. Jesp. VI. 25. 12).

4. 46. 5. The learned current of coining on a Latin basis, on the other hand, has never been interrupted. We find such words as historify, lenify, nullify, virtify, vivify (16th c.), aurify, carnify, cornify, diabolify, divinify, miftify (after magnify), brutify, typify (17th c.), acidify 1797, acetify, carbonify,
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chondrifly, cretify, gasify, lignify, objectify, ozonify, subjectify, verbify (19th c.) with meaning ‘convert into, make . . .’: The sf is usually quoted as -fy (so also OED). However, with the exception of negrofy and argify, all words end in -ify which is the suffix in its real form. Stems ending in [i] drop this before the sf.

4. 47. 1. -ine, -in /am, m, in/

is ultimately L -inus (which is related to E -en in t. wooden), one of the several -n- sfs denoting appurtenance. In AL -inus forms adjs with the meaning ‘pertaining to’ on the following types: femininus (derivatives from personal sbs), anserinus (derivatives from sbs denoting animals), marinus (derivatives from sbs denoting places), Saturninus, Alpinus, Tarentinus (derivatives from proper names). Latin adapted also a few Greek words in -inus (with the same sense), as adamantinus, amethystinus, corallinus, crystallinus which were, however, subsequently treated as words in -inus.

4. 47. 2. The English pronunciation of early loans, such as masculine, feminine, Latin (formerly Latine), libertine, sanguine (ME), genuine 1596 a.o. is [in]. The MoE tendency is, however, to pronounce L i = [ai], and under learned influence the pronunciation of a word has sometimes been refashioned (as in divine). On the other hand, the co-existence of two pronunciations gave rise to variants with other words, too. Most of these adjs are NL scientific words (though they may go back to Ancient Latin). There are adjs used as primaries which denote names of genera in natural history, as accipitrine, bovine, caprine, equine, feline, murine, passerine. Many derivatives from names of animals and minerals which have AL patterns are used as adjs, as adamantine, crystalline, canine, equine and others coined after them on a Latin basis of coining, as olivine, opaline, alkaline, saccharine, also used as primaries. Riverine 1860 is an isolated word derived on a native basis of coining.

Of the AL type Saturninus are such words as Petrine, Pauline, Johannine.

4. 47. 3. In French, the substantival use of adjs led to the coining of names for chemical materials in -ine (the feminine prob. caused through obvious association with matière which was silently understood), type aniline. English imitated this use, which accounts for the prevailing pronunciation [m], recognizable also in the spelling -in to which -ine has often been reduced. Exs of words denoting chemical products are atropine, camphine, benzine, benzidine, glycerine, methylamine, nicotine, newrine, strychnine, gasoline, vaseline etc. etc.

Bromine, chlorine, fluorine, iodine, which are names of elements, also have the sf whereas in French and German the corresponding words are without it.

The preceding type has been imitated in countless trade names of medicines, cosmetics and the like, as brilliantine, aspirine, dolantine, atroverine, albertine, grenadine, neovalpine etc. etc. These formations are not restricted to E; the type is international.

As we have already pointed out, the spelling in the chemical group is often -in (stearin, aspirin, amygdalin, chlorin a.o.). In systematic nomenclature -ine is, however, used for organic bases and alkaloids (quinine, strychnine) while
-in is employed for neutral substances (stearin, palmitin, gelatin, amygdalin). Non-scientific usage does not, however, respect this distinction. We will hardly find any other form than gasoline.

4. 47. 4. In organic chemistry, names of hydrocarbons (in the systematic nomenclature proposed by Hofmann, 1866) have an -n suffix, which occurs in the variants -ane, -ene, -ine, -one. The last three are said (see OED -ane suff.) to represent OGr -ênê, -înê, feminine patronymic endings after which -ane was coined to complete the series (-une was also proposed by Hofmann, but has not been used). The question is not important, however, as the series of sfs is rather arbitrarily formed with the vowel signs of the alphabet. The strongest sf is -ene [in], found in such words as abietene, anethene, asphaltene, acetylene, benzene, camphene, ethene, kerosene, methane, propane, styrolene a.o. The sf -ane is weaker. Exs are butane, ethane, pentane, hexane, octane, propane. Seldom used are -ine (as in ethine, propine) and -one, as in propone, quartone, pentone, sextone (-one is also more vaguely used for other chemical derivatives, as in styrone, valerone).

4. 48. 1. -ing [Iŋ] (type cutting)

is originally the ending of the gerund, a rival form of OE -ung (which had disappeared by about 1250). Corresponding forms are found in all Germanic languages. As a formative of the gerund it does not much interest us here. But -ing has developed a series of functions and meanings which place it within the sphere of wf, outside the scope of the action noun proper. The semantic shades with which -ing forms words have existed from the earliest periods of the language though the center of semantic gravitation has considerably changed.

-ing sbs denote the generic act, fact, practice of what the verbal idea implies. These sbs are possible with any vb; they are generally termed gerunds or verbal nouns. This use has been established in the language since the 14th c.

The -ing sb denotes a specific instance of what the verbal idea implies, as liking, licking, helping, serving (as of food), blessing, christening, wedding, meeting, sitting, outing, merry-making, warning, painting etc.


Denominal are walling ‘wall work, walls coll.’ 1382, piling ‘mass of piles, pilework’ 1488, carding 1468, railing 1471, timbering 1486, listing 14... ‘material of which the list of cloth is composed’ (fr. list ‘border, strip’, there is no vb). The meaning is either ‘the collectivity of . . .’ or ‘material for . . .’. Later exs are channeling 1580, fencing 1585, piling 1558 H, plaiding 1566, shelling ‘husks’ 1598, tiling 1526 H, towelling 1583, sheathing 1587, shirting 1604 (no

16 Marchand, The categories
vb), looping 'material' 1647, masting 1627 'masts coll.', flooring 1624, matting 1682, pegging 1611, piping 1660 'pipelike trimming in dressmaking', guilling 1611, grating 'framework etc.' 1636, tabling 'table linen' 1640, sacking 1707, sheeting 1711, plankling 1751, sugaring 1740, plumbing 1756, lathing 'lathwork' 1756, icing 1769, silvering 1710, legging 1763, skirtling 'border' 1764, tinning 'coating' 1761, halting 'material' 1796, carpeting 1806, lettering 'the letters inscribed' 1811, gearing 1825, plating 1833, plugging 1875, poling 1842, slating 1816, shirring 1892, skidding 'planks used as support' 1859, steeling 1869, trowling 1883, tubing 1845, sandaling 1881, hop-sacking 1884, jacketing 1851, shafting 'system of shafts' etc. 1825, wicking 'cord, fibre for wicks' 1837, skirt-ing 'material' 1825, banding (recent, not in OED or Spl.).

A somewhat different concrete sense underlies such words as necking 'part of a column' 1804 (Arch.), nosing 'end of a bench' etc. 1771, siding 'additional side-track' 1825, shoaling 'shallow place' 1574, mouthing 'entrance to a mine' 1883, wharfing 'structure in the form of a wharf' 1691.

As a formative of sbs with a concrete meaning -ing is very strong. In this respect, zero derivatives are no rivals; it is necessary to point this out as Biese's conspectus (p. 309) is apt to give a wrong impression. Denominal -ing is not affected, anyway.

4. 48. 3. Ing- sbs are often doubly connected, so it cannot always be said with certainty whether this or that word has been derived from the vb or the stem sb. Lettering 1645 was probably coined as a vs with the now obs. meaning 'letter-writing', but in the present sense of 'letters inscribed' it is certainly denominal. Whether wadding 1627 is derived from the vb 1579 or the sb wad 1540, cannot be decided, though present-day analysis certainly connects it with the sb. Ceiling is difficult: the word is first recorded 1380; the vb does not occur before 1428 and is obviously back-derived from it as it means 'furnish with a ceiling'. A sb *ceil does not occur; obs. cyll 'canopy', which is prob. cognate with ceiling, is recorded 1552.

4. 48. 4. There are also derivatives from locative particles. Inning is OE in sense 'income' etc., but in senses 'lands taken in', 'time during which a person, a party etc. is in' etc. the word is modern. Offing 'off part, remote part' etc. is recorded 1627. Outing is recorded as early as 1440. To the same group belong easting 'approach to an easterly direction' 1628, and westing 'distance made towards the west' etc. 1628.

The -ing type is much weaker than the corresponding German -ung type. This is quite natural if we consider that by the side of -ing there are -age, -al, -ance, -ence, -ation, -ment and zero-derivatives. As for sfs, German has only -ung.

4. 48. 5. Sbs denoting the concrete result of the verbal action are especially frequent, most often in plural form. Exs are cutting, building, drawing, etching, pencilling, writing, scoring, layering 'coat of plaster', lending 'money lent' [lighthings, winnowings, siftings, earnings, savings, diggings 'result', meltings, movings, loppings, leavings, skimmings, scrapings, shavings, shearings, sweepings, knockings (mining term = 'small pieces broken off from stone by hammering'), stampings, spawlings 'expectoration' (archaic).
Ing- sbs do not commonly denote abstract result. Exs are earnings in the obs. sense of ‘gain, profit’ 1200, learning ‘knowledge’ 1340, finding in sense ‘verdict of a jury’ etc. 1859 H.

4.48.6. As a result of zero derivation, -ing sbs from denominal vbs came to be felt connected with the vb as well as with the sb underlying the formation. The process sets in in the 14th c. but does not grow common before the 16th c. and has been exceedingly frequent since the 19th c. Exs are staging 1323 ‘scaffolding’ (vb stage ‘build’ 1330 is rare, the OED has only one quotation, so staging is more probably derived from the sb stage 1300), trapping 1398 (the vb is chiefly used in the second ptc, moreover, no gerund is recorded), stabiling 1481 ‘stable buildings collectively’ (no connection with the vb), tailing ‘tair-rope’ 1495 (no vb rec. before 1663), roofing 1440 (the vb is first quoted 1475), housing 1400 ‘houses collectively’ (see 4.58.3).

4.49. -ing /ɪŋ/ (type sweeting)

is the basis of -ling. In OE it was very productive, forming various kinds of denominal sbs (see OED s.v. -ing²). Its productivity hardly survived into Middle English. Coinages that have been made since the Middle English period, are chiefly names for varieties of apples. Most of the words are adjectival derivatives, as sweeting 1530, wilding 1525, greening 1600 (also denoting a variety of pear), russetting 1607, souring 1846. Desubstantival are queening 1430 and golding 1580.

A few other derivatives are lording 1200 (f. lord, perh. coined after atheling), fairing ‘present from a fair’ 1574, golding 1580 in sense ‘gold coin’ (cp. shilling, farthing ON) / sweeting 1300 ‘sweet, beloved person’ (perhaps after littling ‘little child’ OE), gelding 1382 (f. geld ‘barren’ 1230; the OED gives ON gelding r as the origin), whiting 14... (a fish; the OED assumes MDu wijting as the origin).

Bunting 1300 (name of a bird) and hilding 1582 ‘worthless person or beast’ are of uncertain etymology.

4.50.1. -ish /ɪʃ/

is an adjectival sf with various functions and meanings. Since OE times it has been used to derive ethnic adjs, causing -i mutation in English, Welsh (OE Welisc f. Walh), French (OE frencisc, as against OE Franca ‘Frank’). OE scyttisc, denisc were in ME refashioned into Scottish, Danish, after Scot, Dane. The type has proved productive to the present day. Exs are British, Celtic, Czechish, Finnish, Flemish, Icelandish, Irish, Israelitish, Jewish, Jutish, Keltish, Kentish, Lettish, Netherlandish, Polish, Swedish, Turkish. Greekish (still used by Milton) is no longer used.

4.50.2. With the same basic meaning of appurtenance the sf is tacked on to other sbs. In OE we find such words as cildisc, cirlisc or ceorlisc ‘churlish’, eorlisc, mennisc ‘human’, haþenisc ‘pagan’, intendisc, ütlendisc, folisc  a.o., meaning ‘of the nature of...’. Since the ME period the sf has, however, been used to convey a derogatory shade. The nuance perhaps arose from ceorlisc 16*
and hæfénisc. ME are elvish, feverish, foolish, goutish ‘predisposed to gout’, swainish, wolfish, womanish. Later are recorded dromish, elfish, fennish, fiendish, girlish, hellish, hoggish, lumpish, monkish, popish, Romish, qualmish, roguish, snakish, waterish, urchinish, wifish (16th c.), fairish, freakish, hornish, mobbish, modish, monkeyish, owlish, swainish ‘boorish’, (17th c.), hippish (f. hip ‘hypo-
chondria’), liquorish, mulish ‘stubborn’, piggish, priggish, stylish, summerish (18th c.), swellish ‘dandified’, vixenish, vulgarish, wispish (19th c.). Other exs are bookish, apish, boyish, boorish, brutish, dwarfish, clownish, mannish, prudish, skittish, sheepish.

4. 50. 3.  There are a few deverbal coinages, as snappish 1542, mopish 1621 ‘given to moping’, and peckish 1785 ‘disposed to peck or eat’. Ticklish may be from the verb or the old adj tickle.

In colloquial and journalistic use, -ish is also tacked to cpds, proper names and phrases, with the same derogatory nuance as the desubstantial group: Heineish, Marc Twainish, Queen Annish, Chelseaish, West Endish, New-
Dealish, stand-offish, at-homeish, public-schoolish, old-masterish, out-doorish, schoolboyish, undergraduatish.

4. 50. 4.  From particles are derived uppish ‘arrogant, proud’ etc. 1678 and offish ‘inclined to keep aloof’ 1830. Derivatives from pronouns are selfish 1640 and the quite recent AE word ittish ‘sexually attractive’.

Feesish 1393 fits in semantically, but the word is of uncertain etymology.

4. 50. 5.  As far back as the second half of the 14th century we find -ish tacked on to adjs denoting color. Yellowish ‘of the nature of yellow’ 1379 perh. arose as a desubstantial derivative, with yellow taken as a primary. Other exs are greenish 1384, reddish, whitish 1398, bluish 1400, blackish 1500, brownish 1555, greyish 1562, purplish 1562, ‘nearing, but not exactly ...’.

From its use with adjs denoting color the sf was extended to other adjs with the same nuance of approximation. The adjs are chiefly 16th c. and later. Exs are darkish 1398, baddish, coldish, goddish, dryish, largish, lightish, longish, shortish, smallish, biggish, narrowish, thinnish, youngish, oldish, latish etc.

4. 50. 6.  Recent (20th c.) is the use of -ish with numerals, chiefly used to denote approximate age or time: fortyish, sixtyish etc. ‘about ... years of age’, eightish, ninish etc. ‘about ... o’clock’. It may also be used of the grades of a student, as in eightish ‘having about an eight’.

4. 51. 1.  -ism /izm/

forms abstract sbs (wffb and wfnb). Scientific words signify ‘doctrinal system of principles’. The principles may be of a religious, philosophical, political or literary character. Exs are Christianism, paganism, Judaïsm, catholicism, protestantism, gallicanism, Lutheranism, Lutherism, Calvinism etc. / Aristotelism, Platonism, Thomism, Scotism, Leninism, marxism, existen-
tialism, nominalism, realism, idealism, hedonism, behaviorism / communism, socialism, nationalism, fascism, imperialism, Toryism, Whiggism, federalism / Euphuism, Petrarguism, realism, naturalism, surrealism, symbolism, dadaism, impressionism, expressionism, classicism, romanticism etc.
4.51.2. The sf may be tacked on to any other word signifying a real or pseudo-principle, a slogan or the like, as in fanaticism, absenteeism, egotism, mannerism, colonialism, babyism, blacklistings, blockheadism, busybodyism, defeatism, favouritism, gangsterism, jingoism, hoodlumism, idiosyn- 

crasyism, scoundrelism, toadyism etc. All these words have a disparaging 

character, denoting such undesirable things as appear in the form of a regular 

system, a typical behavior or undesirable practice. The sf is never used to 

form words denoting something praiseworthy or even neutral. Heroism and 

patriotism are loans from French. For recent coinages see ASp 32. 292—296, 

1957. Of general interest is W. Rüegg, Cicero und der Humanismus. Zürich 

1946 (pp. 1 ff. on -ism).

4.51.3. In medical use, which is international, -ism conveys the meaning 

‘abnormal condition’, as in alcoholism, cocalinism, anomalous, deaf- 

mutism.

4.51.4. There is also a group of words meaning ‘idiom, peculiarity of speech’ 

which existed already in Old Greek and passed into Latin and hence into the 

various European languages. Instances are Americanism, archaism (= OGr), 

Anglicism, Briticism, Iticism, Scotticism, Italicism, Hibernicism, Atticism 

(= OGr), Irishism, vulgarism, provincialism, soecism (= OGr), colloquialism, 

foreignism, modernism, newspaperism a.o., denoting a peculiarity of style 

when tacked on to the name of a writer, as in Carlyanism, Gibbonism, De Quin- 

ceyism.

4.51.5. Criticism 1607, orig. in senses ‘fault-finding, critical remark’, is 

derived fr. obs. adj critic ‘fault-finding, censorious’ just like the more modern 

fanaticism etc. (see above) on the basis ‘state of being . . .’. The original 

implication of ‘unfavorable judgement’ continued, but a neutral sense also 

developed. After criticism ‘critical remark’ Dryden coined witticism ‘witty 

remark’ 1677. Truism 1708 is another word of this sense group which joins 

the preceding group on the basis of ‘particular instance of . . .’.

4.51.6. The sf is ultimately OGr -ismós (sometimes -isma), by origin a sf 

with deverbal impersonal sbs (rheumatismós ‘flowing’ (of humors), as name of 

disease, f. rheumatizomai, baptismós or baptisma f. baptizo ‘dip in’). It is not, 

however, with this function that the sf has become productive in English or 

the various other European languages. The word christianismós in ecclesiasti- 

cal Greek was by origin a deverbal derivative from christianizō ‘profess christian-

ity’, but could also be connected with christianós ‘christian’. The word 

passed into ecclesiastical Latin as christianismus which was analysed as 

derived from christianus. Signifying ‘practice, religious system of the christians’ 

it attracted paganismus (744 in Du Cange) der. fr. paganus. The age of the 

Reformation brings the words Calvinismus and Lutheranismus. The 16th c. 

marks the real rise of -ismus words, and from that time onwards we find 
corresponding coinages in English and French. With the progress of science 

and learning the sf grows considerably and is now the common property of 

the languages of all those nations which have directly or indirectly undergone 

the influence of Greco-Latin civilization.
4.51.7. Today there exists a derivational connection between words in -ism and words in -ist and adjs from both are derived in -istic. Historically speaking, the adjs are derived from words in -ist which are much older, but they were subsequently used in connection with the -ism words, too (cf. also 4.43.5 for the alternations -ic/-ism, -ic/-icism).

4.51.8. Coinages are made from proper names, common sbs, and adjs. With derivatives from proper names, -ism is tacked either on to the name (thus implying descendence from the founder of the respective system, as in Platonism, Aristotelism, Thomism, Spinozism, Machiavellism, Marxism etc.) or on to the adj derived from the name (i.e. the adj used as primary, connecting the -ism with the followers of the founder, as in Cartesianism, Hegelianism, Leibnizianism, Baconianism, Mohammedanism, Wesleyanism; we sometimes have doublets, as Kantism/Kantianism, Lutherism/Lutheranism). When the derivative joins the group ‘idiom’ the coinage is made from the name.

Words of the group ‘idiom’, when denoting the idiom of a language, are derived from the ethnic adj (used as primary, type Attic-ism), chiefly on a NL basis: not Englishism for ‘British idiom’, but Briticism, not *Frenchism, but Gallicism. Irishism is used beside Hibernicism. Iricism 1743 was coined on the analogy of other -icism words, esp. Scoticism 1717, and -icism was extended to Briticism 1743, Italicism 1773. Non-ethnic derivatives in the ‘idiom’ group have also an adjectival basis (modernism, vulgarism etc.), with the exception of derivatives from proper names of writers.

In the ‘slogan’ group the sf is always tacked on to the sb.

4.52.1. -ist /-ist/

forms nominal personal sbs with the basic meaning ‘one connected with ...’. It is ultimately OGr -istès, a sf with agent nouns derived from verbs in -ize. Many words passed into Latin where they were adapted with the termination -ista, as grammaticista, logista, lyrista, sophista (CL). In ecclesiastical Latin we find such words as agonista, baptista, canonista, catechista, evangelista, exorcista, hymnista, psalmista, tocista a.o., and in Medieval Latin also words derived from Latin roots, as legista, jurista (after canonista), copista. In Ecclesiastical Latin we also find words derived from proper names, as Origenista, Platonista, Scotista, Thomista, denoting a follower of Origenes etc., and words derived from adjs used as primaries, as realista, nominalista (fr. realia, nominalia ‘that which is real resp. nominal’). The sf has spread to the various European languages as a formative of denominal sbs, including English where it has never had any derivational connection with verbs in -ize (which is the OGr principle of derivation), so the indication of the OED (s.v. -ist 1. and 2.) is misleading.

4.52.2. Loans from Latin or French are such words as baptist, evangelist, exorcist, psalmist (ME), latinist, humanist, canonist, papist, atheist (16th c., French). From about 1600, the sf can be considered as an English formative, in words such as linguist 1588, tobacconist 1599, votarist 1603, non-conformist 1619, bigamist 1631 and others (see below).
4. 52. 3. Many words belong to the field of science, denoting either a) the adherent of a theory or scientific principle or b) a person exercising a scientific profession, after the ML patterns indicated above. Exs are a) atomist, mechanist, realist, nominalist, deist, equalist, anarchist, (17th c.) etc. etc., in countless present-day words such as humoralist, hedonist, vitalist, transcendentalist, euhemerist, animalist etc. etc. / b) anatomist, botanist, economist, dentist, hygienist, oculist, physicist, psychiatrist, technicist/americanist, anglicist, germanist, indianist, orientalist, phoneticist, phoneticist etc.

4. 52. 4. The principle advocated may be of a non-scientific kind, and -ist words then denote one who is addicted to something, a political party, an ideology or the like. Exs are tobaccoist, orig. ‘one addicted to tobacco’ 1599, militarist, monopolist 1601, egotist, pleurist, perfectionist, escapist, careerist, defeatist, abortionist / collaborationist, annexationist, isolationist, extremist, alarmist, rightist, leftist, marxist, socialist, communist, nationalistic, fascist, gaullist, falangist etc.

Words in -ist denoting the upholder of a principle are usually matched by an abstract sb in -ism denoting the respective principle (see -ism).

4. 52. 5. On the analogy of such words as L citharista, cymbalista, tympanista, ML chorista, organista, lutanista have been formed such words as flutist 1603, harpist 1613, rhapsodist 1646, psalmodist 1652, violinist 1670, violist 1670. Chorist 1538, citharist 1596, cymbalist 1656, lutanist 1600, choralist 1841 are adaptations of Latin words. Pianist 1839 was taken from French. The frequent AE pronunciation [pi'ænist] shows the tendency to connect the word with piano, pron. [pi'æno]. On the other hand, soloist 1864, is derived from solo.

All these words denote the performer of a musical art.

From the preceding group the sf was extended to literary and other artistic fields, partly under the influence of French. Exs are humorist 1599, essayist 1609 (both later adopted into French), annalist, novelist, diurnalist, columnist, anecdotist, cartoonist, caricaturist, landscapist / billiardist, funambulist, pugilist, equilibrist, ventriloquist.

4. 52. 6. There are several other words in which -ist implies the idea of special knowledge or special achievements, as statist 1584 ‘statesman’ (perh. an italianism originally), florist 1623 ‘expert in the knowledge of flowers’ etc., which attracted gardenist (Horace Walpole) and orchardist 1794, ebonist ‘worker or dealer in ebony’ 1706. From query was derived querist 1633, from type the word typist 1843, orig. ‘printer’. The French loan copist 1682 was soon refashioned into copyist (after copy). In recent usage, the sf often loses its learned character. Balloonist 1828 was still coined as a learned word, but in cyclist, motorist, autoist, stockist ‘tradesman who keeps goods in stock’ (1923), the sf has lost its original character though ‘such uncouth examples as swimmist, knittist, doggist, cigarist ... hoofologist ... tennist ... chalkologist’ (MeAL Spl. I. 363) may betray the desire for highsounding, ‘learned’ words.

4. 52. 7. Following the line traced by the ML patterns, English has coined words from proper names of persons, common sbs and adjs used as primaries. The basis of coining is NL with most words of the emphatically scientific
vocabulary, i.e. the sf is tacked on to the Latin stem. But a good number of words have been formed on a native basis, i.e. the sf is tacked on to the English word (with occasional elision of a final vowel, as in ebonist which is perh. only a rendering sf F ébeniste 1680, querist, or an inserted latinizing n, as in tobaccoon). While the sf may be attached to proper names and common sbs in wfnb (Annist, Bonapartist, Brunswist, Darwinist / cartoonist, columnist, essayist, gardenist), it is very seldom tacked on to native adjs used as primaries: rightist, leftist represent a weak type.

The stress of the -ist word (in wfnb) is on the same syllable as in the unsuffixed basis.

4.52.8. Words in -ist are derivationally connected with words in -y, -ism, and -istic.

Type archaeology/archaeologist. Exs are pairs in -logy/-logist, -amy/-amist, -omy/-omist (not astronomer), alchemy/chemist, anatomy/anatomist, botany/botanist, metallurgy/metallurgist.

Type atheism/atheist. The alternation is between -ism words denoting a doctrine or system and -ist words denoting its adherent. A few exs are idealism/idealist, materialism/materialist, hedonism/hedonist, realism/realist, nominalism/nominalist, deism/deist, spiritism/spiritist.

Type atheist/atheistic. It is chiefly from words denoting the follower of a scientific doctrine or system that adjs in -ic are derived. Exs are idealistic and other -ist words of preceding group. C.p. also 4.43.5.

4.52.9. Derivatives from adjs in -ic involve the phonological alternation [ik/sast], as in attic/atticist, historic/historicist, public/publicist, technic/technicist.

4.53. -ister /istə(r)/

has not been very productive in English. In Old French occur such words as alchemistre, batistre, choristre, by-forms of words in -iste. The sf is prob. -ist plus the -istre we find in ministre, maistre. Several words of the group passed into Middle English, first with the spelling -istre which was later adjusted to -ister, i.e. the termination was apprehended as -ist plus -er (cp. similar refashionings in practicioner, musician etc., see -er sf). Exs are legister, alchimister, palmister, divinister, chorister, sophister. In ME a few words were coined with the sf, as pardonister.

Barrister, in form also barrester recorded 1545, contains either the sf -ster (q.v.) or -ister, perhaps after legister which was still in use in the 17th c. and sophister. Sophister and chorister are the only ME loans which are still alive.

4.54.1. -ite /ait/

is a substantival sf (wfnb and wffb) denoting appurtenance. It is ultimately OGr -ités which was a formative chiefly on the types Stageiros ‘a man from Stágeira’ and haimat-ités ‘blood-stone’. Through the translation of the Septuagint many biblical names came to end in -ites. They passed into eccl. Latin as Israelita, Moabita, Sodomita etc. together with sbs derived from personal proper names which were coined in ecclesiastical Greek to designate the
follower of a sect, named after the founder, as Iacobita, Nicolaita, and derivatives from common sbs likewise denoting sectarians, as monophysita. It is esp. the type of words derived from proper names which became strong in ML and which has passed into the various European languages.

4. 54. 2. In English we find loans since the ME period (13th c.), chiefly from the ecclesiastical sphere. Exs are Adullamite, Canaanite, Jacobite, Israelite, Sodomite (ME), Euchite, Hieracite, Ismaelite, Maronite, Mennonite (16th c.), coenobite, stylite, Ebionite (17th c.). As an English formative, -ite becomes productive chiefly in the 19th c., but a few words are already found in the 18th c. Derivatives are made from proper names of persons with the meaning ‘follower, disciple of . . .’, as Bryanite, Campbellite, Hickite, Millerite (members of sects), Brontëite, Hugoite, Ruskinite, Shelleyite / Darwinite, Spencerite / Pittite, Peelite, Hitlerite, Stalinite, Wallaceite, Vansittartite. Pre-Raphaelite belongs here, and semantically the word Laborite.

The OED says that the words ‘have a tendency to be depreciatory, being mostly given by opponents, and seldom acknowledged by those to whom they are applied’ (s.v. -ite). It is difficult to tell to what extent this is correct. It certainly does not apply to the ‘sect’ group, nor has pre-Raphaelite a contemptuous tinge. Recent words like Stalinite, Laborite, Bevanite, Wagnerite, do not usually imply depreciation either.

4. 54. 3. The OGr type Stageirites was first revived in 19th c. English words such as Durhamite ‘inhabitant of Durham’, Claphamite, Ludlowite, Sydneyite ‘now rare and somewhat contemptuous’ (OED). In recent AE, -ite is, however, a vogue suffix, though it is termed ‘hideous’ by Mencken. There occur Camdenite, Brooklinite, Englewoodite, Raleighite, Seattleite, Yonkersite etc. (MeAL 549 and Spl. I. 363). ‘In that field, indeed, it seems to drive out all other suffixes’ (Mencken).

4. 54. 4. There are also other coinages with the meaning ‘one belonging to a certain place or milieu’, derived from common sbs or adj’s, such as cityite, suburbanite, socialite, social-registerite (Th. Wolfe). Words denoting devotees or the like are turfite, ruggerte, beachite.

Arkite 1774 ‘belonging to Noah’s ark’ was coined as an adj, but has also been used as a sb. The word hawcubite ‘ruffian (infesting the streets in London at the beginning of the 18th c.)’ 1712 may be a word containing our sf. Mamonite 1712 belongs in the ‘sect’ group with meaning ‘follower of (personified) mammon’. The preceding words are the earliest English derivatives I have come across.

4. 54. 5. In scientific nomenclature, -ite serves various uses. In mineralogy it is the systematic ending of mineral species, suggested by OGr words such as anthrakítès, haimatítès, ophítès, selénítès which passed into Latin and French. Loans are marcasite 1471 (ML marcasita), basanîte 1794 (LL basanites), ampelíte 1751 (L ampelítis), chlorîte 1794 (either OGr chlorîtis, with the by-form -itis that formed some words in OGr, or simply an Ec with the sf). Towards the close of the 18th c. a great number of names of minerals begin to be coined (derivatives from personal names are esp. frequent). Exs are abichîte (Dr.
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Abich), acanthite (OGr ἀκανθά), adamite, aegirite (Aegir), aeschynite (OGr αἰσχύνη), agaphite 'kind of turquoise', albertite, lunulite (lunula), magnesite, norite (Norway plus -ite), etc. etc.

In palaeontology -ite forms names of fossil organisms, as in ammonite, dendrite, cancerite, choanite, hippurite, ichthyolite, lignite, trilobite.

In anatomy and zoology -ite forms words denoting parts of a body or organ, type som-ite 'segment of the body'. The type is originally French and was imitated in English after 1850. Exs are cer-ite, pleur-ite, pod-ite.

In organic chemistry -ite forms the names of various organic compounds, as in dulc-ite, mann-ite (f. manna), pin-ite. Frequent are names of explosives, as cordite, dynamite, lyddite, pancastile, rifleite, tonite. The sf is much used with commercial names of products, as ebonite, bakelite, vulcanite.

In inorganic chemistry -ite forms names of salts of acids, as in nitrite 'a salt of nitrous acid', sulphite. The sf here is not the provenance-denoting OGr -ites, but the ablaut variant of -ate established by Guyton de Morveau and Lavoisier in 1787.

4.54. 6. Words in -ite passed into English from French where L -ita became -ite. Several 19th c. uses of the sf are also imitated from French, but the pronunciation of the sf is [æt] under the learned influence of OGr -ités, L -ita. Cp. also the pronunciation [auts] rendering OGr -ités and [am] rendering L -inus. In derived adjs in -itic as dynamitic, Moabitic, Islamicitic etc. the pronunciation is, however, [itik] whereas derivatives with other morphemes retain the vowel of -ite: dynamiter / Ismaelitish, Israeliitish, Moabitish etc.

4.55. 1. -ity /ətI/ forms abstract sbs from adjs with the meaning 'state, quality, condition of...'. Coinages are originally and predominantly made on a Latin basis of coining which accounts for the rareness of derivatives from native roots, and for the stress on the antepenultimate. The oldest words are 14th and 15th c. loans from French, such as ability, actuality, agility, bestiality, captivity, diversity, infirmity, impasseability, liberality, lubricity, singularity a.o. The French words do not represent popular phonetic developments but are what are a little unfortunately termed 'mots savants', i.e. they are formed on a Latin basis of coining. F rusticité 1327, lubricité 14th c. are not derived from the adjs rustique, lubrique but represent L rusticitas, lubricitas.

French as the immediate source of the preceding English words accounts for the spelling -ite, -itee in Middle English which became -ity in MoE. A few words were borrowed from French as formations containing the variant -te (see below): chastete 1225 (= OF chastete), scarrete 13.. (f. ONF escarrete), curiouste 1380 (= OF curioste), falsete 1330 (= OF falsete). In the 16th c. they were latinizingly refashioned into chastity, scarcity, curiosity, falsity.

4.55. 2. The English sb was not originally formed from the English adjective, but is either a separate loan or a word coined as the actual or potential Latin sb in -itas. Sincerity 1546 (with [e]) has, from the point of view of coining, nothing whatsoever to do with sincere 1533 (with [i]), nor has chastity 1225 (with [a]) with chaste 1225 (with [e]) or nobility 1398 with noble 1225. Historical-
ly speaking, adjs and sbs are separate loans. This is even clearer if we compare super\textit{fluity} ME with super\textit{fluuous} ME, atroc\textit{ity} 1534 with atrocious 1669, assid\textit{uity} 1605 with assiduous 1538, hilar\textit{ity} 1500 with hilarious 1823, simplic\textit{ity} 1374 with simple 1220. Duplic\textit{ity}, felicity, fidelity are not matched by any adj, sens\textit{uality} 1340 is older than sensual 1450. But synchronically speaking, -\textit{able}/-\textit{ability}, -ible/-\textit{ibility}, -ic/-\textit{icity} have a direct derivational connection. With -\textit{able}/-\textit{ability} (-ible/-\textit{ibility}), the synchronic relevancy of the pattern has gone far beyond its original morphological basis. While other adjs derive sbs in -\textit{ity} only when the adj is Latin coined (rascal\textit{ity} f. rascal = OF rascal is exceptional), the derivative range of -\textit{able}/-\textit{ability} (the graphic variant -ible/-\textit{ibility} has only weakly developed) today comprises practically any adj in -\textit{able}, including adjs derived from native roots (lo\textit{vable}/lo\textit{vability}).

4.55.3. The alternation -\textit{able}/-\textit{ability} which originated in borrowed Latin word pairs such as implac\textit{ability} 1522/implac\textit{ability} 1531, impe\textit{ccability} 1613, obs. am\textit{able} 1430—1677/am\textit{ability} 1604 subsequently gave rise to such sbs as cap\textit{ability} 1587, inflamm\textit{ability} 1646, excit\textit{ability} 1788, agree\textit{ability} 1778, respect\textit{ability} 1755, account\textit{ability} 1794, liability 1794, adapt\textit{ability}, alter\textit{ability}, amen\textit{ability}, am\textit{iability}, attain\textit{ability}, compar\textit{ability}, impe\textit{achability}, present\textit{ability} (19th c.). No -\textit{ability} words appear to exist for appeal\textit{able}, attack\textit{able}, commend\textit{able}, consum\textit{able}, count\textit{able}, dec\textit{ayable}.

Examples of derivation on the pattern -ible/-\textit{ibility} are visibility 1581 (cf. LL vis\textit{ibilitas}), inf\textit{allibility} 1611 (cf. ML inf\textit{allibilitas}), compat\textit{ibility} 1611, feas\textit{ibility} 1624, inv\textit{incibility} 1677, respons\textit{ibility} 1787.

Derivatives from adjs with a native basis are sale\textit{ability} 1797, lov\textit{ability} 1834, un\textit{saleability} 1871, read\textit{ability} 1860, unread\textit{ability} 1871, belie\textit{vability} 1865, un\textit{believability} 1851, work\textit{ability} 1784, unw\textit{orkability} 1881. In AE the type seems to be more productive. Mencken (AL\textsuperscript{4}, Spl. I. 366) quotes such words as bu\textit{yability}, clean\textit{ability}, club\textit{ability}, get\textit{ability}, grind\textit{ability}.

4.55.4. The derivative force of -\textit{ability} is today practically restricted to the formation of sbs from deverbal adjs with a passive meaning. For others the corresponding sb is in -\textit{ableness}. This accounts for char\textit{itableness} (un-), comfort\textit{ableness} (un-), consc\textit{ionableness} (un-), favor\textit{ableness} (un-), season\textit{ableness} (un-), peace\textit{ableness} (un-); the OED quotes a short-lived peac\textit{ability} 1382—1440, as rendering an OF word), service\textit{ableness}, treason\textit{ableness}, treas\textit{urableness}, valu\textit{ableness} without any competing sb in -\textit{ability}. In other cases, the word in -\textit{ableness} is the regular one while the sb in -\textit{ability} is rare or less common: agree\textit{ableness}, cred\textit{itableness}, fashion\textit{ableness}, honor\textit{ableness}, profit\textit{ableness}, proportion\textit{ableness}, prefer\textit{ableness}. The following pairs seem to be equally common: ami\textit{ableness}/ami\textit{ability}, amic\textit{ableness}/amic\textit{ability}, suit\textit{ableness}/suit\textit{ability}. The only example I can think of to show the reverse is reput\textit{ability} which (acc. to OED) is more frequent than reput\textit{ableness}.

The derivative in -\textit{ness} is usually older while -\textit{ability} words are much more recent. This is especially so with sbs of the t. un\textit{accountability} which are chiefly 19th c. or later. A few exs are un\textit{accountableness} 1676 (-\textit{ity} 1704), un\textit{alterableness} 1620 (-\textit{ity} 1847), un\textit{ansuerableness} 1625 (-\textit{ity} 1849), un\textit{approachableness} 1727 (-\textit{ity} 1846), un\textit{assailableness} 1870 (-\textit{ity} recent, no qu. in OED), un\textit{attainableness} 1690 (-\textit{ity} 1850), un\textit{availableness} 1548 (-\textit{ity} recent, no ex in
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OED), unavoidableness 1599 (-ity recent, no qu. in OED), unchangeableness 1548 (-ity 1813, once 1400), uncompliable 1687 (-ity 1880), unconformableness 1711 (-ity 1833).

4.55. 5. -icity/-ic: lubricity 1491 (= F, LL) conn. with lubric 1490, rusticity 1531 (= F, L), connected with rustic 1440, attracted such words as eccentricity 1551, electricity 1646, authenticity 1657 (the corresponding French words are all much younger), elasticity 1664, domesticity 1721, publicity 1791, apostolicity, atomicity, catholicity, historicity (19th c.). 

-ality/-al: actuality 1398 (= ML; F actualité is rec. from the 14th c.; to be corrected in OED s.v. actuality), connected with actual 1315, bestiality 1374 (= F), connected with bestial 1393, liberality 13.. (= F, L), conn. with liberal 1387, attracted virtuality 1483 (no pattern in F or L recorded), fatality 1490 (F, L) conn. with fatal 1374, brutalty 1549, vocality 1597, superficiality 1530, reality 1550, rascality 1577, causality 1603, joviality 1626, literality 1643, banality, technicality (19th c.) etc. etc.

-arity / -ar: singularity 1340 (F, L), conn. with singular 1340, followed by regularity 1603 f. regular 1387, peculiarity 1610, similarity 1664, spectacularity 1883 etc.

Other types: salinity 1658, torpidity 1614, intrepidity 1704, trepidity 1721, abnormality 1731, activity 1530, levity 1564, egoity 1651, femineity 1820, inferiority 1599, convertity 1600, ubiquity 1546 and many others, all coined on a Latin basis. A recent Americanism is Americanity ‘the genuine American spirit’.

4.55. 6. There are a few -ity derivatives from native adjs, as oddity 1711, queerity 1713, betweenity 1760. Playful or vulgar are such words as coxcombity, threadbarity, fairity, womanity (after humanity), see OED s.v. -ity. Scantity 1398 (rare) is prob. scant ‘scarcity’ 1350 plus quantity.

The stress is on the antepenultimate.

4.55. 7. As in Latin there are no -itas derivatives from ptcns, we can form no -ity variants of absoluteness, completeness, requisiteness whereas we often have -ness and -ity derivatives from one and the same adj of Latin origin.

The suffix is generally quoted as -ty (OED, Je, Ko etc.), but I very much doubt whether -ty has ever been felt to be a formative, except for the extension -alty (see below). Otherwise -ty is a termination in loans, which often look like English coinings: sovereignty, frailty, naivety, nicety, certainty, surety, safety represent OF souverainete, frailete, naivete, nicete, certaïnte, surie, sauvete. The only form in which -ty acquired restricted independence is the extension -alty which represents OF -alte, from L -alitatem. AF legal terms are severalty 1449 ‘separateness’, personalty 1481 ‘personal goods or property’, temporality 1377 ‘the laity’ etc., spiritualty ‘clergy’ etc. c 1400 H, commonalty ‘the common people, the commons’ 1290, mayoralty 1386 (= OF mairalle) ‘the office of a mayor’. After the last of these shrievealty 1502 was coined (shrieve is an older variant of sheriff) as well as sherifality, later followed by squirealty 1856. On personalty are fashioned nationally ‘national property’ 1812, and reality in the now current sense ‘real estate’. 
Specialty, loyalty, royalty repr. OF specialte, loialte, roialte (the OF variants of L -itatem are pop. -te and -ete and Latinizing -ite). Casualty 1423 and reality 1440 seem to have followed the group, if we are to judge by the lack of recorded originals in Godefroy (OF realte is recorded, but with meaning ‘fee, tax’ only, whereas reality formerly had the meaning ‘reality’ also).

4. 56. 1. -ive /iv/

is an adjectival sf with the meaning ‘characterized by . . . ’ which English owes to Latin and French. The sf is ultimately L -iuus, a formative chiefly deriving adjs from the second participle of verbs, as administrativus, admissivus, affirmativus, appellativus, captivus, collectivus, expectativus, inductivus, infectivus, nativus, passivus etc. The sf has been productive in all stages of Latin and, in its respective forms, in the Romance languages. In Old French, the form of the sf was -if (fem. -ive). A number of words passed into Middle English (beginning with the 14th c.), such as affirmative, expressive, native, negative, pensive, representative, successive, first spelled and probably also pronounced -if. The change into -ive is partly due to the influence of Latin, partly a result of the place of the main stress (see Jesp. I. 6. 52). Though the first -ive words came into English through the medium of French, Latin influence has prevailed in that the basis of coining with English new-formations was originally Latin. Words were originally coined as deverbal adjs derived from second Latin ptes (which were also often the derivational basis for English verbs, see -ate vb sf). The words may have an actual Latin pattern, but the existence of an original is practically irrelevant. Many adjs have a French counterpart as well. The basis of coining in French was the same, which may have helped in the extension of the pattern. Exs from the 16th c. are affective, attractive, abusive, collective, cognitive, concoctive, conductive, persuasive, affective, from the 17th c. absorptive, accumulative, additive, allusive, appropriative, comprehensive, contradicutive, convulsive, creative, educitive, effusive, excursive, inductive, productive, retrospective etc., from the 18th c. decorative, elusive, hesitative, admisive, suppressive, administrative, from the 19th c. aggressive, appreciative, competitive, contortive, confederative, adaptative, migrative etc.

4. 56. 2. From a structural point of view, most of the preceding Latin-coined words in -ive are matched by Latin-coined sbs in -ion. Thus the alternation is affective/affect, the adj having the meaning ‘characteristic of, pertaining to what is denoted by the other member’. The phonalogical changes of consonant involved are [tv/son] (with adjs in -ive), [siv/son] (after n, l or short vowel plus -ive), [siv/zon] (after long vowel or diphthong plus -ive) ([stiv] alternates both with [srzon] and [srson]). Sometimes stress change is involved, as with executive/execution, -itive words, such as additive/addition, cognitive/cognition, most -ative words, such as migrative/migration, accumulative/accumulation etc.

A more detailed illustration is the following: 1) the opposition [siv/son] is observed with pairs in -essive-/ession (aggressive/aggression, possessive/possession etc.), -ensive/-ension (extensive/extension, comprehensive/comprehension etc.), -ansive/-ansion (expansive/expansion etc.), -ulsive/-ulsion (convulsive/
convulsion, impulsive/impulsion etc.), -issive/-ission (permissive/permission, omissive/omission etc.); 2) the opposition [əv/əzon] we have with pairs in -asive/-asion (evasive/evasion, abrasive/abrasion), -osive/-osion (explosive/explosion, corrosive/corrosion), -usive/-usian (conclusive/conclusion, illusive/illusion), -ative/-ation [əsiv/əzon] (decisive/decision, incisive/incision); 3) the opposition with word pairs in -ersive/-ersion, -ursive/-ursion may follow either 1) or 2): [ə(r)əv/ə(r)əzon] or [ə(r)əzon] (subversive/subversion, abstrusive/abstersion, excursive/excursion); 4) the opposition [tv/əzon] occurs with anglicized pairs in -ative/-ation [ətv] or [ətv/əzon] (decorative/decoration etc.), -ative/-ation (completive/completion etc.), -ive/-ion (auditive/audition etc.), -utive/-ution (constitutive/constitution etc.), -ative/-ation (motive/motion etc.), -active/-action, -ective/-eption, -ective/-ction, -active/-uction (attractive/atraction, collective/collection, affective/afflection, constructive/construction), -ptive/-ption, -ptive/-ption (conceptive/conception, descriptive/description, adoptive/adoption), -ative/-ation (attentive/attention), -infective/-inction, -unitive/-unction (distinctive/distinction, subjunctive/subjunction), -umptive/umption (consumptive/consumption); 5) the opposition [tv/əzon] is found with such pairs as digestive/digestion, suggestive/suggestion).  

4. 56. 3. Words which were originally loans or Latin-coined could be analysed as derived from English vbs in -s or -t. In this way we get a new pattern of derivation on a native basis of coining producing such derivatives (chiefly from endstressed vbs, combat is derived from combat sb) as sportive 1590, coercive 1600, persistive 1606, conducive 1646, humective 1633 (from the now rare vb humect), amusive 1728, adaptive 1824, adoptive 1834 H, denotive 1834. Other exs are combative, concretive, constructive, constructive. Secretive is first recorded 1815, indirectly through secretiveness ‘propensity to conceal’, as defined in a quotation from a treatise on physiognomy; i.e. the adj is derived from the vb secrete ‘conceal’. The common pronunciation I have heard in the States, is [ˈskrɪtɪv], as in a secretive person, though Kenyon-Knott do not list it. They give only [ˈskrɪtɪv] which is the normal pronunciation for the biological term (as secretive glands). A secretive person is a person who keeps things secret, but a gland secrètes. (The explanation of the OED s.v. secretiveness is misleading. That secretiveness is quoted earlier than secretive 1830 is incidental to the derivational process. If secretiveness were merely formed after F sécrétivité, a word like *secretivity would have been the most likely adaptation.). Crescive 1566 has no French or Latin original and does not fit the discussed patterns. It is perh. formed from crescere, in imitation of the weak pattern cadiv-us, noc-ivus, opt-ivus.

4. 56. 4. Latin-coined words in -ative could often be analysed as representing an English vb plus -ative /ətiv/. This leads to the PE type assortative. Exs are calmative, causative, commutative, confirmative, affirmative, confutative, connotative, conservative, continuative, denotative, disputative, excitative, exhortative, expectative, exploitative, fermentative etc.

4. 56. 5. The word talkative (beg. 15th c.) is difficult to account for. It is probably originally a facetious word, perh. mock-Latin of the well-known
macaronic kind. The formal basis was given by the numerous words in -ative resp. -ativus in Latin. The word has given rise to several facetious coinages such as babblative 1583, writative (Pope), speakative, unwalkative (q. Jesp. VI. 25. 24).

In American English we find derivatives also from everyday words and word groups, as costive ‘costly’ 1848 DA and afterthoughtive (heard in conversation). The suffix is more frequent in combination with -ness. Very common is stick-to-itiveness 1867 (OED Spl. s.v. stick 35). There is also the word hang-to-itiveness 1879 DA. The force of the sf probably lies in the extension / ı́tı́ ı́tı́ / which has produced a few AE words of the talkative type: stay-at-homeativeness 1831 DA, wide-awakeativeness 1845 DA, go-aheadativeness 1846 DA.

4. 56. 6. English formations in -ive are almost all deverbal, in contradistinction to Latin and French derivatives which are in part denominal (tempestivus, arbustivus, aestivus, festivus / craintif, maladif, fautiif, hätatif). Opinionative 1547 is either a blend of the obsolete words opinionate 1553 (formed like passionate 1450) and opinative 1530 (= L opinativus) or, as the OED supposes, extended from opinative (= obs. F opinatif), recorded 1574, after opinion. Authoritative 1605 f. authority is coined after quantitative 1581 and qualitative 1607 (repr. quantitativus ML and qualitativus LL f. quantitas resp. qualitas). The Latin word potestativus (not recorded in its anglicized form before 1630) may have favored the coinage of authoritative semantically. Argumentative 1642 (perh. repr. F argumentatif) is semantically related to authoritative. Facultative 1820 is either another Ec in the group of -ty words or F facultatif. The sf in this group as well as in talkative has the form -ative.

4. 56. 7. Adjs derived on a native basis or such as may be analysed as coined from an English stem, have the stress on the same syllable as have the unsuffixed words. Exceptions are adjunctive, instinctive and argumentative. Unconnected words are stressed on the third from the end (words of two syllables on the first syllable).

As the chief derivational English pattern is that based on a Latin participial stem, and as Latin ptc stems end either in -t or in -s, -ive was naturally tacked on to a stem ending in -s or -t only. The phonological pattern has, however, also been observed with the other types discussed.

4. 57. 1. -ize /aiz/[^1]

is ultimately OGr -izo, a sf with both transitive and intransitive verbs, as in OGr kaumatizo ‘subject to heat (kauma)’ and ‘be subjected to heat, suffer from heat’, hellenizō ‘make Greek, hellenize’ and ‘act as a Greek, speak Greek’. But other verbs had either one or the other sense, the group of transitive verbs being the stronger one. A good many words passed from Ecclesiastical Greek into Latin where, by the fourth century, they had become latinized as verbs in -izare: agonizare, anathematizare, baptizare, barbarizare, catechizare,

christianizare etc. Verbs with a Latin stem were also formed, as moralizare, pulverizare, a derivational type which in Medieval Latin produced such words as auctorizare, temporizare. In Old French we find many verbs, belonging chiefly to the ecclesiastical sphere, as baptiser (11th c.), martyriser, scandaliser (12th c.), canoniser, évangéliser (13th c.), anathématiser, catéchiser, cicatriser, exorciser, moraliser, podiser, pulvériser (14th c.). The time of greatest productivity for Latin and the languages influenced by Latin came with the Renaissance.

4.57.2. The first words we find in English are loans with both a French and a Latin pattern, as baptize 1297, au(c)torize, canonize, evangelize, sabbatize, solemnize (all in Wycliffe), catechize, harmonize, martyrize, moralize, organize, scandalize, syllogize, tyrannize (15th c.). Early 16th century words may still be considered loans, as naturalize, poetize (from French), psalmize (16th c). Toward the end of the 16th century, however, we come across many new formations in English, such as bastardize, epitomize, equalize, gentilize, pilgrimize, popularize, spiritualize, villainize, womanize. The formal and semantic patterns were those underlying the analyzable loans from Latin and French, but owing to the renewed study of Greek, the educated had in general grown more familiar with its vocabulary and used the patterns of Old Greek word-formation freely. Platonize ‘philosophize after the manner of Plato’ conformed to a Greek original which could be imitated in words like Petrarchize ‘imitate Petrarch’s style’, Martinize ‘discourse in the strain of Martin Marprelate’, Epicurize and others. As OGr hellénizō meant ‘turn into Greek’, Germanize ‘turn into German’ was formed while Latinize had already a Late Latin pattern latinizare. Intransitive verbs after OGr hellénizō ‘act as a Greek’, barbarizō ‘act as a barbarian’ were frequent between 1580 and 1700 while they form a minor type in PE. Examples are gentilize, monarchize, paganize, popularize, soldierize.

Though English adopted many Old Greek words, it basically introduced derivative patterns. We therefore find that English derivatives in -ize often have quite different Greek equivalents, as a comparison between OGr hypnoō, kauteriazō, monopōleō, narkoō, organoō, philosopheō, phlebotomeō, sympathēō, tragōdeō with their English counterparts shows.

4.57.3. We find many new formations between 1580 and 1700. The verbs belong to the terminology of literature, medicine, natural science, and theology. The great share of Puritanism is instanced by such words as adulterize, heathenize, paganize, popize, puritanize, rabbinitize / Arianize, Babelize, Calvinize, Israelize, most of which are obsolete today. Of the many verbs coined between 1580 and 1700 the following are in common use today: apologize, civilize, criticize, dogmatize, equalize, fertilize, formalize, humanize, Italianize, jeopardize, methodize, monopolize, naturalize, paganize, patronize, philosophize, Romanize, satirize, secularize, signalize, specialize, spiritualize, sterilize, symbolize, tranquilize.

4.57.4. Comparatively fewer words were formed in the 18th century. Examples are anglicize, apostrophize, attitudinize, brutalize, circularize, dramatize, elegize, gallicize, generalize, idealize, legalize, legitimatize, liberalize, magnetize, materialize, modernize, neutralize, personalize, plagiarize, politicize, scrutinize, systematize.
4.57.5. The growth of science characterizes the vocabulary of the 19th century in general. To it we owe large numbers of -ize verbs which it cannot be our task to list here. Our own technological century has added countless other words of which many have passed into general use, as even the layman now lives in a more or less technical world. A few of the 19th century words that have gained wider currency are acclimatize, actualize, bowdlerize, burglarize, canalize, capitalize, carbonize, centralize, colonialize, commercialize, demilitarize, deodorize, emphasize, focalize, immunize, industrialize, macadamize, militarize, mobilize, nationalize, polarize, propagandize, rationalize, serialize, socialize, stabilize, standardize, summarize, terrorize, visualize. The 20th century has coined such words as hospitalize 1901, radiumize 1914, motorize 1918, Sovietize 1919, robotize 1927, publicize 1928, Sanforize 1948, dieselize 1948 (Reifer), and more recent nuclearize, denuclearize, de-Stalinize, communize, civilianize (Reifer), weatherize (Reifer).

4.57.6. In all the stages of its history, derivation by -ize has worked chiefly on a Neo-Latin basis (cf. 4.1.13). Formations from other than Greek or Latin stems have never been numerous. Most of them are not in common use, either. The phonetic shape of such derivatives, moreover, was often similar to that of Latin-coined words, as in foreignize 1661, villainize 1599 (for a long time both spelled -anize), womanize 1593, heathenize 1681, lionize 1809, workmanize 1930. Recorded also, though not current, are Englishize 1858, nakedize 1858, peasantize 1904, gospelize 1643. In recent technical jargon, however, the barrier seems to have been overcome, hence such words as winterize, weatherize (a car), tenderize (as meat; the verb is first recorded 1733, but termed 'rare' in OED), standardize 1873. Cf. also derivation from modern personal names which became common about 1800.

4.57.7. Basically, we have the same derivative types in English that existed in Old Greek and Late Latin. Verbs are derived from substantives, adjectives, and proper names of persons. The semantic patterns also are similar. Modern usage has added derivatives from proper names of persons as transitive verbs (Old Greek had only intransitive verbs here) and derivatives from names of chemical substances.

Deadjectival verbs (almost exclusively belonging to sense group legalize, see below 4.57.8) represent the strongest type. Examples are actualize, ethicize, fertilize, fossilize, legalize, legitimatize, nationalize, neutralize, objectivize, regularize, secularize, spiritualize, sterilize. Derivatives from ethnic adjs are americanize, anglicize, gallicize, latinize. Cp. also such words as europeanize, sovietize, westernize.

Desubstantival verbs are alchemize, capitalize, crystallize, epitomize, fictionize, itemize, jeopardize, lionize, memorize, ozonize, scrutinize, sectionize, terrorize, victimize.

For derivatives from proper names and names of chemical substances see below 4.57.8 the types winterize and alcoholize.

4.57.8. The principal semantic types with transitive verbs are the following:

1) legalize 'render, make...' (the regular type with deadjectival verbs; the strongest pattern; for examples see above 4.57.7;
2) itemize ‘convert into, put into the form of, give the character or shape of . . . ’ as in dramatize, fictionize, satirize / methodize, monopolize, systematize / motorize, dieselize / unitize, robotize;

3) propagandize ‘subject to the action, treatment, or process of . . . ’, as in hospitalize, radiumize, scrutinize, terrorize;

4) winterize ‘subject to a special (technical) process connected with . . . ’, as in weatherize, also in derivatives from proper names of persons: simonize, sanforize, galvanize, grangerize, macadamize, bowdlerize, de-Stalinize;

5) alcoholize ‘impregnate, treat, combine with . . . ’, used in derivatives from names of chemical substances, as alkalize, carbonize, etherize, hydrogenize, ionize, oxidize.

The group of intransitive verbs is much smaller. The meaning usually conveyed is ‘do as, act in a way characterized by . . . ’, as in astronomize, botanicalize, geologize, theorize, dogmatize / burglarize, deputize, patronize, philosophize. Derivatives from adjectives are possible, but not very common. Examples are americanize, classicize, generalize, medievialize, moralize, tranquilize. In derivatives from personal names the implication is ‘imitate the manner or style of . . . ’, usually with a slightly depreciative tinge. Examples are Barnumize, Calvinize, Petrarchize, Pindarize, Platonize.

4.57.9. The productivity of -ize is tied up with certain phonetic shapes. The bulk of verbs end in [-aiz], [-aiz], and [-naiz] (many of them deadjectival verbs in -alize, -arize, -anize). Next come verbs in [-aiz] (largely through verbs in -icize). Smallest in number are the verbs ending in [-taiz, -daiz, -maiz] instanced by such verbs as dramatize, dramatize, hypnotize, legitimatize, robotize, systematize, unitize / bastardize, jeopardize, methodize, oxidize, propagandize, standardize, subsidize / atomize, Barnumize, economize, epitomize, itemize, Macadamize, victimize. There a few verbs in [d-Zaiz], derived from OGr substantives in -gia, as apologize, elegize, eulogize, geologize. Other phonetic types are practically negligible.

4.57.10. Almost all deadjectival verbs and many verbs derived from substantives ending in a consonant are also analyzable as direct formations on an English basis. For derivatives from adjectives in -ic the alternation is -ic/-icity, -ic/-icism, as in classic/classicize, romantic/romanticize, poetic/poeticize, domestic/domesticize, ethic/ethicize, historic/historicize, public/publicize. The alternation -ic/-ise, as in aromatic/aromatize, dogmatic/dogmatize, dramatic/dramatize, hypnotic/hypnotize, magnetic/magnetize, satiric/satirize, systematic/systematize is problematic. Apart from a few pairs, the semantic analysis does not conform to the regular pattern we find with deadjectival verbs. Dogmatize, hypnotize, magnetize, satirize do not mean ‘render dogmatic etc.’, though we might somewhat forcibly interpret them as intransitive verbs used transitively (dogmatize ‘be dogmatic (with regard to something’)’. Historically, they are probably adaptations of F dogmatiser, hypnotiser, magnetiser, satiriser. It is therefore difficult to assign derivative relevancy to the heterogeneous -ic/-ise pattern.
4. 57. 11. Derivation from substantives ending in -y implies the alternation [1—au]: alchemy/alchemyze, astronomy/astromonize, economy/economize, theory/theorize (-y = OGr -ia), colony/colonize (-y = L -ia), subsidy/subsidize, scrutiny/scrutinize (-y = L -ium). Elision of other vowels we have in alkali/alkalize, jubilee/jubilize, propaganda/propagandize.

4. 57. 12. Derivatives from or connected with an English word are usually stressed like the latter: cápital/cápitализе, mónophthong/mónophthongize, óxygen/óxygenize, ózone/ózonize, pálatal/pálatalize, propagánda/propagándize, spiritual/spiritualize. Homological stress is also found in systematize (after sýstem). Words formed on a Neo-Latin morphological basis are usually stressed on the antepenultimate (hýpnotize, nárcotize). For the whole stress history see Danielsson 192—216.

4. 58. 1. -kin, -ikin /km, ikm/

is a sf with diminutive or endearing force, today used only as a jocular formative with a depreciative tinge. It represents Middle Dutch -kin, Middle Low German -kin, found in words which passed into English through contact with Flanders and the Low German countries.

4. 58. 2. Proper names of persons occur as early as the 13th c. in English: Willekin (William), Tomkin (Thomas), Timkin (Timothy), Perkin (Peter), Dawkin (David), Janekin (John), Malekin (Mathilde), Hawkyn (Henry), Simkin (Simon) a.o. “As Christian names these seem to have mostly gone out of fashion shortly after 1400” (OED s.v. -kin), but we find them (often in form -kins or -kison) as surnames: Atkins, Dawkins, Dakin, Dickens, Jenkins, Perkins, Watkins, Wilkinson etc. Though the preceding names were originally borrowings from Dutch, they were partly analysable as English words, e.g. Tom-kin, Wil-kin, Tim-kin. This may have helped in the formation of 14th c. words such as fauntekin (f. faunt ‘infant’), maidenkin, fiendekin which have not, however, survived. More recent coinings are napkin 1420 (app. fr. obs. nap = F nappe ‘table cloth’), cannikin 1570 ‘small can or drinking vessel’, in the 19th c. followed by pannikin (1823), manikin 1870 (need not be considered as a loan from Dutch (OED)), obs. rutterkin 1520 (f. rutter ‘cavalry soldier’) ‘swaggering gallant or bully’, obs. bulkin 1583 ‘bull-calf’ (also used as a term of endearment), so thumbikins or thumbkins ‘thumb screws’ 1684, ciderkin ‘kind of weak cider’ 1676, bootikin 1727, orig. ‘instrument of torture’ (cp. thumbkins), joskin ‘bumpkin’ 1798 (if fr. dial. joss ‘bump’, influenced by bumpkin 1570 whose etymology is not clear). Thackeray uses such words as essykin, grudgekin, lordkin, as others have occasionally used boykin, devilkin, godkin, catkin, capkin, wolfkin, ladykin, none of them in current use. But as the above words show, it is not quite correct to say that “the only example which has obtained real currency is lambkin (1579)” (OED s.v. -kin). Limpkin 1871 DA is the common name of the courlan of Florida, Central America and the West Indies. The bird is so called from its limping gait.

4. 58. 3. It is perch. on the analogy of surnames in -kins that in slang one finds such words as babylkins, boykins, sonnikins, Janeykins (f. Jane), chiefly
in addressing a person. *Spillikins* 1734, a name for a game with slips of wood may be from *spill* 'slip of wood' etc.

The sf occurs in swear words, such as *God's bodikins* 1598, *lakin* (prob. f. (our) lady), *pittikin* (fr. *pity*).

4. 58. 4. Loans from Dutch are *catkin* (plant), *dodkin* (a coin), *firkin*, *kilderkin* (measures) a.o. Other words are of uncertain etymology, as *barmkin* 'turret' (northern dial.), *bumpkin* 'lout', *gaskin* 'hose', *gherkin* (= G *gurke*), *griskin* 'lean part of the loin of a bacon pig', *grimaikin* 'old cat or woman', *latterkin* 'glazier's tool', *nipperkin* (a measure), *pipkin* 'a small pot', *rumkin* 'a drinking vessel', *slammakin* 'slattern', *sooterkin* 'sweetheart'. *Pumpkin*, *punikin* 1647 is refashioned from *pompion*, *pumppion* 1545 (= obs. F *pompion* 'pumpkin'), cp. also the spelling *tampkin*, *tamkin* for *tampion = F tampon*.

4. 59. 1. -le [l] (type sparkle)

is similar to -er (as in *clatter* 4. 29) and is found with the same class of dissyllabic verbs, namely such as express sound or movement. Verbs in -le denote (usually quick, rapid, nimble) repetition of short, small movements, often with the shade of jerkiness. There is a smaller group of sound verbs expressive of a series of little or unimportant sounds. The productive force of -le lies in the symbolically expressive value of the sound [l] (see also 7. 35 and cp. L -iculare, F -ailler, -iller, -ouiller where the l was formerly pronounced [l], G vbs in -eln, as *lächeln*, *fächeln*, *ziecheln* etc.). It would be erroneous to look for any concrete source of derivation (Koziol thinks of the vbs as having sprung from diminutive sbs in -let, -ling) as [l] is a primitive linguistic symbol expressive of duration or continuation.

4. 59. 2. Of the recorded OE vbs in -lian there are only a few with the nuance of modern -le verbs, as *dreflian* 'driev (from the mouth or nose)', *twincelian* 'twinkle'. PE *wrestle* is OE in *wrestle* and *wreastlere*. Most of the PE words were coined in ME and esp. EMoE. It may be partly on account of the literary, conventional character of OE documents that so few verbs are recorded from OE; but the ME period is not rich in coinages either. German -eln vbs also crop up in MHG only (see Wi 75).

4. 59. 3. I have pointed out for -er vbs, and the same applies to -le vbs that these words should more correctly be called compounds of several symbolic elements. Like -er, -le is not a derivative sf proper from existing roots. *Twink* is not recorded before 1400, i.e. 500 years later than *twinkle*; *fizzle* is rec. 1532, *fizz* 1665, *quack* 1564 is older than *quack* 1617. Many vbs have probably never had a simple root without the [l] element, as *drizzle*, *trickle*, *rustle*, *hustle*, *bustle*, *shuffle*, *scuffle*, some are blends, as *struggle*, *scuffle*, *hustle* etc.

4. 59. 4. Verbs matched by a simple basis are *popple* 'bobble up' etc., *wiggle*, *sparkle*, *suckle*, *dazzle* (daze), *crinkle* (OE *crincan*), *hurtle* 'strike, drive', *swingle* (all ME), *crackle*, *scuddle*, *prattle*, *crankle*, *hurtle* 'blow' (obs.), *sipple*, *dwindle* (dive), *dribble*, *snuffle*, *grabble*, *waggle*, *draggle*, *paddle*, *hackle*, *waddle* (wade) (all 16th c.), *pettle* 'fondle, pet' 1719, *noddle* 1733, *drip* 1821.
Verbs without a basis are nuzzle, struggle, straggle, trickle, drizzle, scuttle, bustle, hustle, scuffle, shuffle, gurgle, babble, giggle, cackle, jingle, scramble (recent scram is not the origin), ramble, sniggle, warble, grumble, rumble, whistle.

4. 59. 5. Verbs denoting sound are less numerous than those expressive of movement. Exs are gabble, gaggle, cackle, crackle, babble, ratle, prattle, whistle, sizzle, frizzle, tinkle, jingle, giggle, sniffle, tootle, gruntle, rustle, rumble, grumble, mumble.

4. 59. 6. Usually -le goes with a preceding short vowel. It is perh. under the influence of these short vowel verbs that the long vowels of several simple verbs alternate with short vowels in the -le verb: daze/dazzle, prate/pratile, wade/waddle, dwine/dwindle. I am not forgetting that long vowels were shortened before certain consonant clusters in early Middle English. It would only apply to dazzle as the other words are not recorded before the 16th century. We may lengthen the [a] in drag, but lengthening of [e] in draggle is phonetically impossible. On the other hand, tousle 1440 has the same vowel as touse 1300 (in prefixed forms), tootle 1821 the same as toot 1510.

-le is prob. a playfold element in such words as wheedle, dawdle, bamboozle (the only word of three syllables), foozle, footle, argle, argle-bargle, but it is also found in unetymologizable words such as boggle, bungle, puzzle a.o.

Darkle, grovel, sidle are back-derived from darkling, groveling, sidling.

4. 60. -le, -el /l/ (type spittle)

has formed denomin and deverbal sbs, but can no longer be termed a productive sf in English. In OE, its forms were -el, -ela, -ele. Here we are concerned with such words only as have been formed after the OE period.

Derivatives from sbs have diminutive character, as dottle 1440 (OE dot is rec. in sense 'head of a boil') 'plug', in 19th c. also 'plug of tobacco', speckle 'small speck' 1440, knobble 1485 'small knob', its modern variant nubble 1818, nozzle 1608 (f. nose) 'small spout, nose (in various senses)'.

With deverbal sbs it develops various of the meanings usual with this particular class. There exist only concrete meanings, however: rindle OE 'small stream, runnel' = runnel 1577 (blend of run and rindle) = dial. rundle 1587 (another blend of run and rindle or the ablaut variant of rindle), spittle 'salive' 1440, standel 1543 'young tree left standing for timber'. The idea of 'agent, appliance, instrument' underlies prickle OE, spindle (= OE spinel), hackle, hatchet, heckle, hetchel 1300 (but the group is prob. OE) 'instrument for combing flax' etc., swivel 1307 (f. OE swifan), stopple c 1300 'stopper, plug', treadle OE 'step, stair', in sense 'lever' 14...

No coinages have been made since about 1600; as for the deverbal group with the meaning 'instrument', the productivity of the sf had ceased about 1400. The usual spelling is now -le, but -el is retained after v, ch (for phonetic-orthographical reasons rather).

4. 61. 1. -less /ls, leas/

is, formally speaking, the negative counterpart of -ful; like -ful it was still a full word in Old English, in the form læas (= G los). In ME it was no longer an independent word, so cbs with -less are suffixal words. The sf is
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primarily used with substantival bases, conveying the privative meaning ‘without, free from . . .’.

4.61.2. From the OE period are recorded careless, baleless, endless, headless, lifeless, lightless, manless, meatless, mindless, motherless, reckless, restless, shameless, speechless. From the ME period date breadless, breathless, colorless, doubtless, faithless, fatherless, faultless, fearless, footless, fruitless, handleless, harmless, heartless, hoodless, joyless, lawless, legless, loveless, merciless, mirthless, moneyless, needleless, penniless, pitiless, spotless, starless. 15th c. words are hatless, listless, mannerless, ruleless ‘lawless’. Later are hairless, healthless, heatless, honorless, lidless, limbless, limitless, luckless, mastless, matchless, matterless, priceless, sexless, spiritless (16th c.), edgeless, gainless, gateless, honeyless, letterless, noiseless, sportless, stateless, stomachless (first half of 17th c.), stalkless 1698, meaningless, shelterless, thornless, thumbless, tideless, touchless (18th c.), functionless, gameless, genderless, germless, grammarless, hammerless, heartless, hasteless, heelless, humorless, idealless, imageless, keyless, shadeless, sphereless, spineless, systemless, tenseless, trainless, visionless, wireless (19th c.), bishopless 1909.

Derivation from words of French origin was common by 1300. We find the following coinages in the 14th century: faithless 1300, faultless, joyless, merciless 13 . . . , doubtless, fruitless 1340, moneyless 1362, graceless 1374, colorless 1380.

4.61.3. The sfs -ful and -less are often semantically correlative. Especially the old stock of words shows many such pairs, as sinful/sinless, baleful/bateless, careful/careless, shameful/shameless, sorrowful/sorrowless, harmful/harmless, merciful/merciless, needful/needleless, doubtful/doubtless, restful/restless, mirthful/mirthless, faithful/faithless, fruitful/fruitless, fearful/fearless, lawful/lawless (all OE or ME). They were all coined on the semantic basis ‘full of . . .’/‘devoid of, without . . .’. Thus, they were felt to be co-ordinated, the form in -less being the negative of the word in -ful. This appears quite natural if we consider that in OE both sfs were still full words with opposite meanings. As early as the 15th c., -ful had lost of its original meaning ‘full’ to such an extent that its correlation with -less practically no longer existed. This does not mean that their semantic opposition had ceased to be felt altogether (in many words it is felt to the present day), but the distance between the suffixes was no longer the one that had existed between the words full and less.

4.61.4. That pairs existed, anyway does not mean that the two types were nothing but correlates. The types are primarily independent of each other. Semantic opposition made them correlative in many word pairs. But there have always been coinages without their counterparts, such as headless, motherless, loveless, starless / awful, wonderful, skilful, masterful. As early as the 14th c., adjs in -ful had lost their etymological character so far as to make negative counterparts with the prefix un- possible (see the list 4.39.2). Adjs in -less coined since the 15th c. are derived without any relation to possible adjs in -ful; they are merely derived from sfs with the meaning ‘devoid of, without . . .’. If Galsworthy uses will-less, this word is not the counterpart of wilful, but a derivative from will = ‘without will’.
4. 61. 5. Such adjs as restless, doubtless, weariless (this one probably coined as the counterpart of weariful, both 15th c.) could give the impression of deverbal derivatives. It was not, however, before the 16th c. when more words, like changeless 1580, numberless 1573, had joined the group of ambivalent words, that the type 'caught on'. The majority of common deverbal adjs were coined about the same time, viz. the end of the 16th c.: quenchless 1557, dauntless 1593, countess 1588 (after numberless), tameless 1597, fathomless 1606, utterless 1643, spanless 1847 are adjs with the passive sense 'not to be ... ed'. With intransitive verbs the sense is 'un ... ing': resistless 1586, tireless 1591, stayless 1572 (active or pass.), fadeless 1652. Later come exhaustless 1712 'inexhaustible' (pass.) and drainless 1817 with the same meaning, thawless 1813, stirless 1816. Most deverbal derivatives occur only in poetry. Jespersen (VI. 23. 32) quotes imagineless, opposeless, staunchless, teachless, thinkless. Inexhaustless 1739 is a blend of exhaustless and inexhaustible.

Haveless 1175 'without possessions' (obs., but newly formed in Sc in the 19th c.) is either deverbal or denominal (the sb have is rec. 1200). The coinage was partly a refashioning of older haveless, a denominal derivative.

4. 62. 1. -let /lɛt, lɛt/

is a denominal sf, chiefly with a diminutive sense. The rise of the sf seems to offer difficulties. Early loans from French, as chaplet, forcelet, hamlet, mantlet (14th c.), bracelet, frontlet, gauntlet (15th c.) have no diminutive force. "It is somewhat difficult to see how these words gave rise to the English use of -let as a diminutive suffix, as none of them, except the heraldic crosslet, have the appearance of being diminutives of English words; possibly Fr. diminutives like enfantelet, femmlette, osselet, tartelette, were directly imitated by some English writers”, says the OED (s.v. -let). The explanation seems to me to be simpler and less forced than 'direct imitation of French usage'. First, we have the word tartlet 1420 (with this spelling as well as variants in -lote, -late), connected with tart 1400. Secondly, such loan words as castelet 1320, conn. with castle, gablet 1440, conn. with gable, circllet 1481 (though perh. somewhat later in dim. sense), conn. with circle, islet 1538, conn. with isle, though etymologically containing the sf -et, probably helped to establish -let as a sf. Crosslet 1538, conn. with cross, could 'legitimately' be considered a word with the sf -let.

4. 62. 2. By 1550, -let had become an established English formative: armlet 1538 'small arm of the sea' and streamlet 1552 (in OED s.v. -let wrongly assigned to the 18th c.) are obviously influenced by islet; so is the half-latinizing coinage rivulet 1587, while ringlet 1555 and the half-latinizing annulet 1572 join the semantic field of circllet. Other Elizabethan words are townlet 1552, taglet 1578 'small tag, catkin', kinglet 1603, winglet 1611, droplet 1607, deverbal driblet 'small sum' 1591. Later recorded are lamplet 1621, earlet 1668, sparklet 1689, bandlet 1727, runlet 1755. Toward the end of the 18th c. coinages begin to be very frequent, and the sf has ever since grown in productivity, many words belonging to the terminology of anatomy, botany, entomology, zoology. Exs are leaflet 1787, cloudlet 1788, spikelet 1793, rootlet 1793, lakelet 1796, eyelet 1799, archlet, bladelet, bonelet, booklet, branchlet, budlet, brooklet,
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chainlet, conelet, crownlet, featherlet, finlet, fruilet, gorgelet, heartlet, hooflet, hornlet, leglet, listlet, notelet, nutlet, plantlet, plumelet, pointlet, stalklet, starlet, tonguelet, veinlet (19th c.).

4. 62. 3. In AE we sometimes find such derivatives as baglet, buslet, capelet, flatlet (also BE), gounlet, playlet a.o. But the actual frequency of such uncommon diminutives in general cannot compare with that of German diminutives, for instance. English does not know the freedom of coining instanced by such words as Häuschen, Gärchten, Deckelchen, Türchen. Diminution is rather restricted in PE and has shown the same features in the earlier stages of the language too (see E. Rotzoll, op. cit, footnote p. 228, also the works quoted 237 footnote, esp. Eckhardt p. 330).

Words denoting animals are not very numerous. There occur birdlet, crablet, dovelet, fishlet, goslet AE (f. goose, the vowel after gosling), troutlet (19th c.), samlet 1655 (app. f. salmon plus -let, the first word contracted and dissimilated).

As the sf is chiefly tacked on to names of things, it conveys a contemptuous nuance to words denoting persons, as dukelet, lordlet, kinglet, princelet, also godlet. The word starlet for a young film star has no derogatory tinge, as the word is not derived from a personal noun; only a sense development has taken place.

4. 62. 4. Deadjectival derivatives are infrequent: greenlet 1831 (an American singing bird), opellet 1860 'sea-anemone whose tentacles cannot be retracted'. In these words, the sf has no diminutive force, but is merely individualizing (cp. -ling for a similar situation).

4. 62. 5. The sf also forms words denoting articles of ornament. The starting-point is the loan frontlet 1478 (f. F frontlet = frontel-et), analysed as front- (forehead)-let. The series was continued by armlet 1535 H, earlet 1609 (sense obsolete), and 19th c. words such as anklet, leglet, necklet, wristlet, all derivatives from words denoting parts of the body.

Coverlet 1300 is not clear.

4. 63. 1. -ling /lɪŋ/

forms sbs of the following formal types: squireling ‘poor, petty . . .’, steerling ‘young . . .’, i.e. the sf adds a diminutive resp. deprecative nuance to the person, animal, plant (names of things are excluded, on principle) denoted by the root / gadling ‘special kind of . . .’, weak type, used for names of things; the sf has merely individualizing force / popeling ‘adherent of the . . .’, rockling ‘animal living on . . .’ / softling ‘one who is . . .’, youngling ‘animal or plant which is . . .’, i.e. deadjectival derivatives / suckling ‘person, animal, plant connected with what is denoted by the verbal root’.

4. 63. 2. The sf goes back to OE. It is an extension of the OE sf -ing and has sprung from words in which -ing was tacked on to a stem ending in -l, as sêbling, lylîng. The extension is common Germanic (cp. OHG edîling f. edîli, zwînaling ‘twin’ f. zwînîli). In OE the sf is used to form denominal personal sbs, meaning ‘one connected with . . .’, as hyrlîng ‘hireling’ (f. hyr ‘hire’), yrîbling (f. yrîb ‘the action of ploughing’), underîling 1175.
4.63.3. The stages of development were probably as follows:

1) In OE, the sf -ling was tacked on to sbs, adjs, and occasionally locative particles with the meaning 'man'.

2) By c 1220, the sf had come to acquire the meaning 'animal' also, i.e. -ling was used to derive sbs denoting animals. The earliest attested word is youngling in the sense of 'young animal' 1220. Subsequently, -ling with the meaning 'animal' developed the following types:

2.1) nest-lining 'animal connected with . . .' 1399.

2.2) gray-lining 'grey animal' 1450.

Most coinages of this group denote small fish. A few words denoting plants have also been formed.

2.3) The type shearling, originally a desubstantival derivative, came to be analysed as derived from shear vb, so we have a few deverbal coinages from c 1378 on, chiefly names denoting animals (occasionally used for human beings, as in suckling 1440): earling f. ean 'bring forth lambs' obs.

3) The type youngling 'young animal', gave rise to a new and very strong type wolf-lining 'young wolf', -ling here being a clipped form of youngling (English has never formed compounds containing a diminutive determinatum). This type existed by the beginning of the 14th c.

The idea of younness and, therefore, relative smallness, has been so strong that it has also extended to coinages of group 2) in that the sf -ling forms only words denoting small animals or plants, though those types have an entirely different basis.

4) The latest development is the personal sb with a derogatory shade of meaning, as in squirreling (see 4.63.5) a 16th c. result of applying the preceding types to words for human beings.

4.63.4. An early word denoting an animal is youngling 1220 H. Later come killing dial. 1300, orig. denoting the young of any animal (no basis appears to be recorded), twilling dial. 1300, wolfling 13 . . . , codling 1314, shearling 1378, nestling 1399, duckling 1440, grayling (fish) 1450, yearling 1465, goosling* 15th c., failling 'young animal fattened for slaughter' 1526, porkling 'small pig' 1542, kidling 1586, earling* 'young lamb' 1596, groundling (fish) 1601, rockling (fish) 1602, catling 1606, sandling (fish) 1611, gnatling 1614, steerling 1648, yearling 'young lamb or kid' 1637, brandling (worm used as bait by anglers; from the color of the red markings) 1651, gruntling 'young pig' 1686, chickling 18th c., fingerling 'young salmon' 1705, trousling 1739, fledgling (fr. fledge adj) 1830, reedling 'the bearded titmouse' 1840, bridling 1856, goatling 1870.

Wreckling 1601 = reckling 1781 'smallest and weakest animal of a litter' is of uncertain etymology, ridgelings 'castrated animal' 1555 is not clear either.

Words denoting young plants are sapling 1415, youngling 1559 H, oakling 1664, seedling 'young plant' 1660, timberling 1787, wildling 1840, yearling 1849 H, ashling 'ash sapling' 1883. All these words have a diminutive sense. Spindling 1842 implies the idea of 'weakness'. Vetchling 1578 is not different in sense from the simple vetch 1374.
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Diminutives denoting things are not formed, though nonce-words such as bookling, eyeling, giftling may occasionally be found.

Personal sbs implying the idea of 'smallness, youngness' are stripling 1398 (app. f. strip which is not rec. before 1459, though), suckling 1440, nursling 1557. Nestling and weanling denote both young children and animals.

4.63.5. The majority of personal sbs, and all sbs formed after the type squireling, have a derogatory shade of meaning. In OE appears the obs. bailing 'womanish man' (prob. the original from which bad is back-derived). The word was, however, too infrequently used to be the cause of the depreciatory shade which is 16th c. only (17th c. according to OED, but see the exs below). The nuance is prob. the result of the combined elements 'smallness' and 'names of animals'. Fondling 'foolish p.' 1440 may also have played a part. Exs from the various formal types given above are shaveling 'priest' 1529, softling 1547, tenderling 1541, worldling 1549, changeling 1555, also 'turncoat', popeling 1561, orig. 'adherent of the pope' (= G Römling), weakling 1557, manling 1575, godling 1570, scatterling 'vagrant' 1590, starveling 1546, courtling 1599, groundling 1602, wormling 1598 (chiefly fig.). Cp. also tidling 'pampered, spoilt child' 1520 (perh. f. tiddle 'pamper' 1560) and bantling 'bastard' 1593 (prob. repr. G Bänkling), words which strengthened the position of depreciatory -ling. Of later occurrence are clerkling, jaytingling obs., dukeling, kingling, lordling H, squireling, witling, vainling obs.

The second world war has added the word quisling which is no derivative but which by coincidence stresses the depreciatory tinge of the sf.

Personal sbs which have neither the nuance 'young, small' nor a depreciative shade are quite rare. From OE we have darling (OE déorling) and underling; later come earthling 1593 and such rare words as deathling 'mortal' 1598, tanling 1611, sweetling 1648. Sibling is a recent (c 1900) revival of OE sibling 'kinsman'.

4.63.6. Words not denoting living beings or plants are not numerous: fingerling 1440, in the obs. sense 'finger-stall', firstling 1535 'first product', gadling 1592 'one of the metal spikes on the knuckles of a gauntlet' (f. gad 'spike'), sideling 1399 (f. side) 'strip of land', capling 1688 'cap of leather on a flail'.

4.63.7. Brisling 1902 is Norw. brisling 'sprat'. Dilling (now dial.) 1584 is perh. a var. of darling. Whether middling primarily belongs here is doubtful. The word is first rec. as an adj (1456), as a sb it is found somewhat later (1543). The sf may be adverbial -ling (as in sideling, heading), but the sb may also be a derivative from mid. It has no depreciative or diminutive meaning, like firstling and the few other words of 4.63.6.

4.63.8. Desubstantival coinages have always formed the majority. The number of deadjectival derivatives is small (darling, fledg(e)ling, faintling, faling, fondling, grayling, softling, sweetling, tenderling, wildling, youngling); still smaller is the group of deverbal coinings (gruveling, scatterling, shaveling, shearling, starveling, suckling, tidling, yeangling, weanling). Underling, firstling, foundling are formed from other bases. See reference q. footnotes pp. 228 and 237.
is an adjectival sf. Its OE form is -lic, identical with the sb lic ‘body’ (which has given both lich and (ge)like). There are corresponding types in the other Germanic languages, and cobs with the respective forms of lic must therefore originally have been bahuvrihi cpds, as a substantival second-word indicates a substantival pattern. In preadjectival use the cobs developed into adjs. The form -li, -ly occurs in northern and midland texts as early as the 13th c. and became universal in the 15th c. It is partly the result of lic as a middle-stressed syllable (cp. ME everich/every), but perh. chiefly due to the influence of Scandinavian words in -lig.

The sf is tacked on to sbs and adjs. Cbs of the t. manly have the meaning ‘appropriate to, befitting ...’. The majority of coinages are made from sbs denoting persons, and the sense conveyed is either that of praise or blame. Exs are friendly OE, kingly, knightly, maidenly, manly, mannerly, shapely, stately, womanly (ME), princely 1500, queenly 1540, portly 1529, soldierly 1577, orderly 1577, pastorly 1616, tutorly (rare) 1611, scholarly 1638, masterly 1666 H, loverly 1875, all implying praise, beastly, homely ‘unpolished, rude’ (ME), slovenly 1515, beggarly 1526, cowardly 1551, obs. bastardly 1552, ruffianly 1570, dastardly 1567, masterly (in depreciative sense 1531—1766), rascally 1596, vixenly 1677, scoundrelly 1790, all words implying blame or odium.

In Old and Middle English the sf still formed derivatives with the non-specialized neutral sense ‘characteristic of, belonging to ...’, as lively, deathly, fleshly, heavenly, lovely, summerly, wordly (OE), homely, timely ‘well-timed’, shapely (ME). The type is rare in MoE: leisurely 1604, sprightly 1596, townly ‘townish’ 1749, weatherly 1729 (said of a ship, ‘able to sail close to the wind’). In Old and Middle English the sense is also inherent in derivatives made from personal sbs: fatherly ‘paternal’, motherly ‘maternal’, priestly ‘sacerdotal’ (OE), manly ‘human’, godly ‘belonging to god, spiritual’ (ME).

The type goodly has formed many words in OE, a few in ME and MoE, but is no longer productive. The sf conveys the shade of ‘resemblance to the quality implied in the basis’ (cp. -ish), but most of the derivatives have developed more or less independent senses from the simple adjs (cleanly has even lost its formal connection with clean through the difference in pronunciation). Exs are cleanly, deadly, goodly, obs. grimly, loathly (OE), gainly, lowly, meekly, sickly (ME), weakly 1577, lonely 1607, poorly 1750. The type has never been used for adjs denoting color, this function being performed by -ish and -y.

With the sf tacked on to sbs denoting time we get cbs of the t. weekly. The sense implied is ‘recurring every ...’, as in daily, nightly, yearly, summerly, winterly (OE), weekly 1489, hourly 1513, quarterly 1563, monthly 1572, termly (now rare) 1598, fortnightly 1800. The use of part of these words as primaries, chiefly to denote newspapers or periodicals, is a 19th c. development (quarterly 1818). Used as subjuncts (adverbs), they represent originally the adverbal formative -lice: OE gēarlice, but from the end of the 14th c. the adj is used as a subjunct: yearly 1375, daily 1440, nightly 1457, hourly 1470.
4.64.6. In OE, numerals, locative particles and participles also admitted of the sf: ānlic ‘only’, þēoelic ‘threefold’ | inlíc, ùllíc ‘inner, outer’, norflíc | brecendlic ‘fragile’, äcorënlíc ‘eligible’ (cp. Eduard Schön, Die Bildung des Adjektivs im Altenenglischen, Kiel, Diss. 1905). Except for ānlic = PE only, none of the preceding words survived into ME.

4.64.7. In MoE we have derivatives of the type northerly. The adjs are extensions of the older words norther (901—1497), souther (900—1622), easter (1387—1816), wester 963 which have been variously extended (cp. norther, northern, northerly, northermost, northernly, northermost). The words of this type occur from about 1550: easterly 1548, northerly 1551, westerly 1577, northeasterly 1739, northwesterly 1611, southeasterly, southwesterly 170S. As adverbs, they are all quoted later.

4.64.8. The range of -ly is much smaller than that of G -lich. This is chiefly due to the invasion of French and Latin which established non-native suffixes (and prefixes) or introduced a flood of Latin and Romance words superseding the old words and preventing the further extensive coining of words after traditional patterns. Besides kinglý the language had royal and regal, besides fatherlý, paternal etc. etc. This process of borrowing was bound to limit a further growth of -ly. It may also be that the use of -like as a second-word has contributed to the narrowing down of the sphere of -ly. There was obviously a strong need for a means of expressing the idea ‘resembling, in the manner of...’ more clearly than it was done by -ly. Adjectives of the -like type crop up at the beginning of the 15th c.

4.65.1. -ment /mɛnt/ is a substantival sf, chiefly forming deverbal nouns from Romance roots. It came into the language through loans from continental Old French and Anglo-French. Exs of ME loans are abetment, achievement, admonishment, adornment, advancement, agreement, appeasement, appointment, assignment, commencement, easement, enticement, judgment, preaching. As the corresponding verbs also existed as loans from French, -ment quickly came to be established as an English formative. By 1300, -ment was obviously a derivative suffix though many of the 14th and 15th century coinages were short-lived. Examples are chastisement 1303 f. chastise 1325, eggment ‘incitement’ 1340—1440 f. egg ‘incite’, onement (coined by Wycliffe to render L unio) 1388, increasement 1389 f. increase, hangment 1440 f. hang and a few more rare words which are obsolete today (see Gadde 72—74). After 1450 the derivative pattern seems to be stabilized. We find endowment 1460, enfeoffment 1460, annulment 1491, controlment 1494, publication 1494. Later are abasement, allotment, allurement, arraignment, assessment, astonishment, baitment, blandishment, consignment, endorsement, garnishment, languishment, management, obligement, releasement, representment, retirement, revilement, treatment (16th c.), abandonment, aggrandizement, amassment, amusement, apporionment, ascertainment, assortment, committee, concernment, confinement, engagement, engorgement, engrautment, environment, estrangement, involvement, securment (17th c.), arrangement, equipment, escapement, harassment, measurement, statement (18th c.), bevelment, placement (19th c.), all from non-native roots.
4.65.2. Derivatives from native roots are wonderment 1535, merriment 1576 (f. obs. vb mery), acknowledgement 1594, needments 1590, amazement 1595, betterment 1598, bodement ‘omen’ 1605, fitment 1608 (ref. in 19th c.), settlement 1626, scribblement 1608, fulfilment 1775; see also below for sbs with the prf en-, em-, be-. From the 19th c. on there are a few more coinages, as catchment, hutment, jostlement, puzzlement, shipment, worriment, worsement (after betterment).

4.65.3. Exceedingly frequent are words with the prf en-, em-: endowment, enfeofment 1460, endorsement, engrossment, enhancement, embarkment, embezzlement, embattlement (16th c.), and later words such as engulfment, enlightenment, enlistment, ennoblement, embalmment, embankment, embarrassment, embarkment, embarrassment, embodiment, embodiment etc.

There are also a good number of words with the prf be-, from native as well as Romance roots, as bestegement 1564, betrothment 1585, benightment 1651, beseechment 1679, bereavement 1731, befoulment, beguilement, beleaguernment, belittlement, bemuddlement, benumbment, bepuzzlement, besetment, bewilderment a.o. (19th c.).

4.65.4. After merriment (whose basis merry had become obsolete as a vb, OE—1627) 1576 has been coined funniment 1845. ADD has foolishment. Oddments 1780 ‘odds and ends’ is another deadjectival derivative, perhaps direct fr. odds after needments. Spenser coined drieriment, hardiment, iollyment, unruliment (q. Jesp. VI. 21. 82) which have not gained currency. The ADD has leftments ‘fragments, remainings’.

Basement 1730 is derived fr. vb base 1587 ‘lay a foundation’, devilment 1771 is fr. vb devil 1593, though both words look like desubstantival coinages.

4.65.5. Sbs in -ment have the meanings which are usual with deverbal sbs. They denote 1) act or fact of . . . , with a tendency to signify a specific instance, as in appointment, arrangement, development, enactment, encampment, enthronement, etc.; 2) something concrete or material connected with . . . , as embankment, embodiment, embayment, equipment, reinforcement, advertisement etc.; 3) the state of being . . . ed (chiefly from verbs denoting mental or emotional state), as astonishment, amazement, bewilderment, embarrassment, embitterment, estrangement / enthalment, encampment, betterment, internment; 4) the place connected with . . . , as encampment, settlement (the group is comparatively small). Many words join several sense groups.

Sense group 3) has been especially productive for the last 150 years. Many words with the basic meaning ‘embarrassment, bewilderment’ or the like, were coined in the 19th c. More recent are perturbation 1901, puzzlement 1922. Old is rabblement ‘disturbance’ 1548.

The word containment 1655 is marked ‘rare’ in OED. But since World War II it has become quite common in the expression ‘policy of containment’.

4.66. -mo /mo/

is a sf, originating from printers’ slang. The Latin names for certain sizes of books, as duodecimo 1658, sextodecimo 1688 were in practice spelt as 12mo, 16mo. This led to the spelling pronunciation twelvemo 1819, sixteenmo
1847. The possibilities are naturally restricted. The lower divisions, as quarto and octavo, were never affected, but several other names of book sizes were coined with the sf, as eighteenmo 1858, twentymo, twentyfourmo 1841, thirty-twomo, thirty-sixmo 1841 (where the etymological connection with the Latin numerals, which are vicesimo quarto, tricesimo secundo, tricesimo sexto, is broken).

4. 67. 1. -most /mest, most/

is an adjectival and adverbial sf chiefly tacked on to locative particles and adjs derived from the names of the cardinal points, expressing the highest degree possible with regard to the position or direction indicated by the basis. Historically, it is not related to most, but is the OE superlative ending -mest. The earliest stage of the sf is found in OE æftemest, ërmest, inmest, utmest. This group of derivatives from locative particles was joined by the adjectival derivative middemest 'midmost' and subsequently extended to other words denoting place, direction, or time, as eastemest, westemest, norpmest, süpmest / lastemest, süpemest 'latest'. As early as OE these cbs were felt to contain mëst 'most' for a second-word and were often spelt accordingly. The spelling subsequently became the rule and has always been retained though the colloquial pronunciation is now [mest].

4. 67. 2. Another change of linguistic feeling is expressed in the adaptation of aftermest and ovemest (f. æftemest and ovemest) into aftermost (1160, sp. aftermest) and overmost (a 1300, sp. overmast) in ME. Aft and ufe were no longer locative particles in ME. Formest (f. OE ërmest) was later revived: 15th c. foremest, 16th c. foremost. Nethermost (sp. nefermest) is recorded a 1300, a refashioning of earlier nethemest, OE nîpemest. Thus, by 1300, as far as derivation from locative particles is concerned, we have -mast, -most tacked to first-words in -er in aftermost, nethermost, overmost, also in uttermost (a 13...), and other coinages follow: furthermore 1400, hindermost 1398, innermost 1413, uppermost 1481 = overmest 1549 (now dial.), undermost 1555, farthermost 1618, outermost 1857. The OED explains the rise of the type "on the analogy of earlier adverbial forms in -more" (s.v. -most). It should, however, be noted that of the earliest -most words, aftermost has never had a counterpart in -more and that nethermore 1382, overmore 1390, uttermore 1382 are much later recorded than nethermost, overmost, uttermost (all 13...). Other -more words, as furthermore 1200, outermore 1388, farthermore 1300 have been matched by -most words rather late (see above), so I think -more words have played little or no part in the rise of -most words. The rise of the type is sufficiently explained by a tendency to derive from resp. connect with the locative particle. This also accounts for the early refashioning of utmest into outmost (sp. outemeste 13...) as utmest had lost its connection with out (the ME spellings ote-, otte-, ot-most as well as the phonetic development go to show this).

4. 67. 3. The use of -er forms as first-words spread to other formations, perhaps partly as a mere mechanical extension in lowermost 1561, rare highermost 1629, lattermost 1821. On the other hand, the -er first-words seem to have represented adjectival forms for the speaker, which explains the for-
mations easternmost 1555 (obs.), westernmost, southermost 1555 (now rare), northermost 1557 (the independent adj norther has no quotations in OED after 1497), subsequently replaced by westernmost 1703, northernmost 1719, southernmost 1725, easternmost 1830 with the current MoE adjs northern, eastern, southern, western instead of the earlier norther (OE—1497), easter (1387—1816), souther (OE—1622), wester OE (ch. Sc). Out has at all times been a first-word with sbs (t. outhouse) which may account for the preference given to utmost. Outermost is quite recent (1857). On the other hand, upmost 1560 joined uppermost 1481 on the analogy of inmost/innermost, utmost/uttermost, hindmost/hindermost, and the latest addition is the just mentioned outermost. The tendency with derivatives from locative particles and names of the cardinal points is to take the adjectival derivative from the respective word as the basis and append -most to it. Cp. also westwardmost 1685 (no other -ward derivative is recorded).

4. 67. 4. The sf is also tacked on to other words denoting local position. As far back as OE we have midst which became midmost and was in the ME period joined by middlemost 1300 (sp. -most), in the 19th c. by centremost (1866). Other exs are hithermost 1563, Sc yondmost 1608, sternmost 1622 'farthest in the rear, nearest the stern', topmost 1697, rearmost 1718, backmost 1782, downmost 1790, bottommost 1861, leftmost, leftermost 1863. From a pronominal adverb is hithermost 1563.

An isolated coinage is bettermost 1762, a mere superlative. Utmost and uttermost, too, no longer primarily express the idea of position.

4. 68. 1. -ness /nes, nis/

forms abstract sbs with the meaning 'state, condition, quality of ...'. Since OE it has chiefly been tacked on to adjs and participial adjs, but in MoE it is also used with various other bases, but not with verbs.

Exs of deadjectival derivatives are bitterness, brightness, cleanness, coolness, darkness, deepness, dimness, drunkenness, evenness, fairness, fatness, fleshiness, goodness, greediness, greenness, grimness, hardness, idleness, longness, thickness, all recorded in the OE period. The sf has been appended to adjs of native as well as foreign origin. From the ME period or later are recorded such words as absoluteness, acuteness, alimentiveness, ancientness, aptness, archness, badness, baldness, bareness, baseness, bayness, beastliness, bigness, brawniness, callousness, closeness, commonness, coyness, deadness, deafness, dearness, dullness, farness, fatalness, fineness, firmness, fitness, freeness (ME, now rare), goodliness, greyness, gumminess, halfness, handiness, humanness, kindness, meanness, rashness, readiness, righteousness, sickness, strangeness, steadiness, carelessness, hopelessness, lifelessness, listlessness / artfulness, wilfulness, wistfulness etc. etc.

4. 68. 2. Though theoretically the sf may be tacked on to any adj, those of native stock form the majority. Next in number are everyday words of French origin. Derivation from adjs of French origin was common by 1300. We find quite a number of them in the 14th century: clearness, feebleness, gentleness, tenderness are recorded about 1300; other derivatives are beastliness 1370,
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curiousness 1386, eagerness 1400, faithfulness 1388, fierceness 1382, fineness 1400, gayness 1377, meanness 1398, nobleness 1400, rudeness 1380, safeness 1375, justness 1430. Formative restrictions exist in so far as adjs in -ate, -ant, -ent chiefly derive sbs in -acy, -ancy, -ency, those in -al, -ial, -an, -ian, -ar, -able, sbs in -ity (see the respective sfs). The sfs often compete and we have sense or other variants such as accuracy/accurateness, entirety/entirety, sincerity/sincereness, oddity/oddness, singularity/singularness, fatality/fatalness, inflexibility/inflexibleness, inextricability/inextricableness a.o. Jespersen's statement that "comparatively few words from Romanic adjs are in common use" (VI. 19. 32) needs qualification, as appears from the above list and other words such as corruptness, promptness, conciseness, usefulness, coarseness, curtness, daintiness. Cp. 4. 55. 4 for -ableness/-ability.

4. 68. 3. Derivatives from composite adjs are also common. Exs are wrong-headedness short-sightedness, level-headedness, kindheartedness, square-toedness, tongue-tiedness, straight-forwardness, watertightness, outrightness, overniceness etc.

Derivatives from participial adjs are drunkенness OE, MoE contentedness, ashamedness, devotedness, cursedness, goneness ‘exhaustion’, setness, unacquaintedness, unexpectedness etc. / knowingness, lovingness, shiningness, shockiness, thrillingness, thrivingness, willingness.

The sf may be tacked on to pseudo-adjs, i.e. such as can only be used predicatively. Exs are awareness, aliveness,aloneness, aloofness.

4. 68. 4. Cbs with numerals are oneness OE (recoined in the 16th c.) and twoness 1648.

Derived from locative particles are outness ‘externality’ 1709, inness 1866, both philosophical terms. We may quote here the word utterness 1827 which is a derivative from utter and thus ultimately connected with the locative particle out. In sense it is, however, a coined from utter as a quasi-superlative, meaning ‘absoluteness, extremeness’.

Cbs with comparatives are betterness, worseness (ME). Exceptional are derivatives from superlatives, as dearestness, nearestness (q. Jesp. VI. 19. 33).

4. 68. 5. There are also derivatives from pronouns and pronominal adverbs, chiefly used as philosophical or philosophizing terms, with the exception of suchness (OE) and muchness (ME) all MoE. Exs are halfness 1530, otherness 1587, sameness 1581, selfness 1586, thisness 1643 (translating ML haecceitas), manyness 1609, nothingness 1631, whatness 1611 (tr. L quidditas), allness 1652, hereness, thereness, whereeness, everywhereness (1674 all). Thusness 1867 is jocular, coinages such as I-ness, me-ness, wheness, whyness are nonce-words.

4. 68. 6. The sf is also possible with phrases which are used as preadjuncts or predicatives. So we find, chiefly since the 19th c., such words as à-la-modeness 1669, fedupness, matter-of-coursenenss, matter-of-factness, used-upness, everydayness, well-to-doneness, up-to-dateness (all 19th c.), some of them quite frequently used now.

4. 68. 7. Occasionally there have been coined derivatives from sbs (out of their use as preadjuncts or predicate complements), as breadness 1866 ‘the
quality of being bread (in connection with the transsubstantiation'), *manness* 'manhood' (Steinbeck, The Pearl 83; the OED has one ex fr. 1225 for *manness* 'human nature'), *childness* (Sh), *gameness* 1810 (*game* is perh. a full adj now). Obs. is *seedness* (1440—1710) 'state of being sown' (the OED derives it from vb *seed* which cannot be as *-ness* is no formative with deverbal sbs). OE had *hædennes* which lives in archaic form *heathenesse*, early associated with the *-ess of richness, largesse*. Dead are OE *nŷdness, râdness* 'readiness', *rûmness* 'roominess'. *Witness* is orig. a desubstantival derivative (fr. *wit* 'knowledge'), meaning 'testimony' (cp. the phrase *bear witness*). The word subsequently developed the sense of 'person giving evidence' (cp. PE *counsel* for a similar sense development).

4.68.8. *Business*, OE *bisignis*, is a moneme today (as the pronunciation shows). As a derivative from the adj *busy* it is pronounced ['bizmis], usually characterized in spelling also, as *busyness*, recorded since 1865. *Wilderness* 1200 is prob. a derivative from the adj *wildern*, with a concrete meaning (see below). *Forgiveness* OE is said to be a derivation from the sec. ptc *forgiven* (OED); but it is perh. rather from the deverbal sb *forgive*, as in *forgively* 1225. The OE spellings are *forgifenes*.

4.68.9. In all stages of the language the sf has chiefly formed sbs with an abstract meaning. An abstract state often comes to appear specified in a particular instance, a general characteristic of abstract sbs. Very rarely sbs in *-ness* denote something concrete. Exs of this nuance are OE *smiriness* 'oil', *sweartness* 'ink' (cp. G Druckerschwärze), *fretwedness* 'ornament', *fastness, wilderness* 'place', *gumminess* 'a gummy concretion', *witnes* (see above).

4.69.1. *-ory* /ɔrɪ, ɔrɪ/

forms adjs on a Latin basis of coining. All combinations have a learned or scientific tinge.

The Latin form is *-orius*. This sf is an extension of *-ius* as tacked on to agent sbs in *-or*. Its original meaning is 'pertaining to, having the character of what is denoted by the agent sb' (*accusator-ius*). Latin agent sbs are derived from the second ptc, so what originally was conceived as *accusatorius* could also be analyzed as *accusat-orius*. In this manner, the sf came to be connected with the verb itself rather than with the agent sb. Latin words such as *absolutorius, damnatorius* (*sententia absolutoria, sententia damnatoria* 'acquittal' resp. 'condemnation') show this new character. Latin more and more developed this shift of standpoint, and adjs in *-orius* were coined from the second ptc of verbs, chiefly meaning 'destined to . . .', as *falx messoria* 'mowing-sickle', *sella portatoria* 'carrying-chair (sedan chair)'), some with the nuance 'having the nature of . . .', as *transitorius, contraditoriус, elusoriус* a.o. The sf has been very productive in the various stages of Latin. The following is a short list of words most of which have been anglicized: *absolutorius, accusatorius, amatorius, auditorius, damnatorius, deprecatorius, obiurgatorius, piscatorius, praedatorius, prohibitorius, pugnatorius, suasorius, transitiorius (CL), completorius, compunctorius, contraditoriус, dispensatorius, explanatorius, hortatorius, illusorius, motorius, oblectatorius, perfunctorius (LL), communitorius, com-
pulsorius, difamatorius, promissorius, requisitorius, satisfactorius (ML), migratorius, respiratorius (NL).

4. 69. 2. We find few E words before 1500. Exs are transitory 1374 (= F transitoire 13th c.), requisitory 1447 and obligatory 1456, both law terms, prob. F réquisitoire 1403 resp. obligatoire 1330; but for contributory 1467 no pattern is recorded, so the word may be one of the earliest Es. On the other hand, it must be borne in mind that the present state of Latin and French lexicology does not admit of the conclusion that absence of record means the non-existence of a word.

The earliest English words are renderings of OF words in the northern French form -ori, -orie. The central French form was -oire, but English kept the oldest form, subsequently changing it into the graphic variant -ory. They have already been quoted. Few words are recorded from the 16th c. for which neither a French nor a Latin pattern appears to exist, as condemnatory 1563, expositive 1586, feudatory 1592 (f. ML feudare 'enfeoff'). Words of this category, coined after 1600 are oblatory 1611, confirmatory 1636, affirmatory 1651, explicatory 1625, ejaculatory 1644, excretory, inflammatory 1681, val- edictory 1651, gustatory 1684, vindicatory 1647. From the 18th c. we get inspiratory, rotatory, statutory, vacillatory, vibratory, and from the 19th c. such words as appreciatory, investigatory, informatory, observatory.

4. 69. 3. Adjs in -ory are Latin coined, derived from the stem of the second ptc. They have nothing whatever to do with Latin agent sbs (the explanation of the OED, s.v. -ory, is misleading in this respect; see also sf -al, -orial). However, for the PE speech feeling they are connected with the English verb which in the majority of cases exists, and the adjs in those cases are stressed on the same syllable as are the vbs. The stress pattern is affirm/affirmatory resp. (for vbs with the termination -ate) appreci/appreciatory. Of the adjs listed above, insofar as they are accompanied by a verb, only rotatory is stressed against the tendency, as compared with rotate; but only so in BE; in AE the stress pattern is in line with the general rule = rôtâte / rôtâtory. As for the stress of the adjs which are not matched by English verbs, they are chiefly stressed on the fourth syllable from the end. Most of the above adjs in question conform to this stress pattern, also auditory, absolatory, hortatory, oblatory, requisitory, transitory a.o. Valedictory is stressed after contradictory. Stressed on the antepenultimate are elusory, illusory, perfunctory.

4. 69. 4. The usual semantic implication of adjs in -ory is 'destined to, serving for, tending to ...', but the nuance is often merely 'connected with, pertaining to ...' is denoted by the (Latin resp. English) vb. In the latter shade of meaning, adjs in -ive often compete with those in -ory (see sf -ive).

English makes a pretty clear distinction between adjs directly derived from Latin agent sbs in -or and such as have a direct connection with the action of the Latin vb. The latter group is characterized by the sf -ory, the former by the sf -orial. The matter has been discussed under sf -al, so we will only add a few such things as seem necessary here. Sf -ory is not used at all with denominal personal sbs in -or. L uxorius, sororius, praetorius (which is deverbal only for the philologist) are rendered as uxorial 1800, sororial 1825,
praetorial 1579. Occasionally L adjs in -ory, -ous are derived from denominal sbs, but they have been short-lived, as gladiatory 1602—1730, senatorial 1523—1684, and the validity of the rule stated is not impaired by isolated coinages. The rule also applies to adjs derived from deverbal agent sbs, as we have pointed out elsewhere (see -al 4.6.6).

4.69.5. A small number of words is synchronically analysable as E vb plus -atory [ətəri, ətəri]. The group comprises only adjs taken from Latin, i.e. the type has produced no English coinings. Exs are accusatory, affirmatory, confirmatory, informary, observatory.

4.69.6. The sfs -ary (165) and -ory are entirely homophonous in BE, in AE they are so only when the stress immediately precedes, as in élementary, satisfactory. In other positions, the sfs receive a secondary stress and are then differentiated: inflationary [ənfləˈneɪʃənəri], but observatory [əˈɒbəˌsərveɪ]. This goes to show that we have to do with two different morphemes which become neutralised in poststress position. Moreover, the derivational processes of -ary and -ory are sufficiently distinct from each other: -ary is a living formative, deriving adjs from English sbs, most of which are analysable as derivatives on a nb, whereas -ory forms deverbal adjs of which a small part only are analysable on a native basis. I therefore disagree with Stanley S. Newman who maintains that "these forms represent the same suffix as tested by functional criteria and by formal criteria other than phonetic form" (Word 4.26).

4.70.1. -ous /əs/

is an adjectival sf which came into English through ME loans from French, such as advantageous, adventurous, ambitious, amorous, cavernous, contagious, contentious, contumelious, courageous, dangerous, famous, feverous, glorious, grievous, lecherous, riotous, savorous, supernitious, timorous, torturous, traitorous, treacherous, troublous, venomous, virtuous, viscosus. These adjs have the meaning 'full of ... of the nature, character or appearance of ...', the implication always being that of strikingness, even obtrusiveness. The nuance is due to the character of Latin -osus which OF -ous, -os, -eus represents (see below). From the 14th c. we have -ous as an English formative, originally with sbs of French origin only. The sf has been very productive. On a native basis of coining it has derived adjs from sbs of French, Latin and native origin, as poisonous f. poison, burdensome f. burden, also by way of correlative derivation, as infectious f. infection. On a Latin basis of coining, the sf has derived adjs from the stem of Latin sbs, as platitudinous f. platitudinous, stem of platitude. The sf has also been used to adapt Latin and Greek adjs whose termination did not fit an English pattern, as vacuous for vacuus, analogous for analogus.

4.70.2. Type poisonous f. poison: glutinous 1340, villainous 13... adulterous 1470 (f. obs. adulter ‘adulterer’, after lecherous). Obs. felonous 1374 is derived from felon, treasonous 1450 f. treason (after traitorous, treacherous), obs. rebellious 1432 f. rebel, poisonous 1565 f. poison (after venomous), odorous 1550 f. odor (after savorous), hazardous 1580 f. hazard, sorcerous 1546 f. obs. sorcer ‘sorcerer’, verdurous 1604 f. verdure, momentous 1652 f. moment, leaven-
ous 1649 f. leaven, founderous 1787 f. vb founder. A few other words are cavernous, cadaverous, cancerous, glamorous.

Type thunderous f. thunder. Derivatives from native roots are not numerous. Timorous 1470 (f. time) is quoted in OED as 'chiefly Sc.'. Obsolete is burdensome 1529, coined after onerous (= OF). The few words which have gained general currency are derived from words ending in -er of which many are connected with the semantic field of 'noise, uproar, violence': slumberous 1495, wondrous 1500 (after marvellous), murderous 1535, slaughterous 1582, blusterous 1548, thunderous 1582, tetterous 'of the nature of tetter' 1719. Boisterous 1474 is of uncertain etymology. The earlier form is boistous. Hugeous 1529 as an extension of an adj is an uncommon type. The influence of related gorgeous 1495 has perhaps played a part in its coining.

4. 70. 3. On the analogy of glorious (as f. glory), contumelious (as f. contumely) we have since the 16th c. derivatives from sbs in -y, as felonious 1575, prodigious 1552 (or L prodigiosus), perfidious 1589 (or L perfidiosus), usurious 1610, burglarious 1769. The word felonious could also be connected with felon, in which case the sf was -ious. Rebellious 1535 ousted the earlier rebellous, either because -ious had come to be felt as an independent sf, or because of a blend of rebellous and rebellion, or because of the possible influence of contentious and contumelious. In the same semantic field belong robustious 1548, orig. meaning 'violent, noisy, boisterous, strongly self-assertive', extended from robust, and uproarious 1819 f. uproar.

Combinations with the sf -ious, synchronically speaking, include acrimonious, ceremonious, harmonious, furious, industrious, sacrilegious alternating with acrimony, ceremony, harmony, fury, industry, sacrilege (note the phonological changes of stress and vowel).

4. 70. 4. On the analogy of the loan pairs ambition/ambitious, contagion/contagious, contention/contentious were derived other adjs in -tious from sbs -ion, -tion, as cautious 1640, repetitious 1675 (common AE), precautious 1711, fractious 1725. Extended we have the pattern in the correlation -tious/-tion: vexatious 1534, ostentatious 1658, disputatious 1656 (not from dispute, as in Jesp. VI. 19. 75), flirtatious 1834, quotatious 1903. Oblivious 1450 may be L obliviosus (OED) in which case we would have an early instance of Latin influence which otherwise sets in after 1500, as far as -ous is concerned. It is also possible to connect oblivious with now obs. oblivy (though this is not recorded before 1475 which should not weigh too much).

4. 70. 5. The word robustious seems to have been the starting-point for the sf -tious [ses] which is found with a group of adjs formed more or less fancifully, the [s] being emotionally expressive of 'pushing' energy. Robustious attracted rumbustious 'turbulent, boisterous' 1778 (the rum prob. as in rumble), rumgumptious 'quarrelsome, violent, bold, rash' 1781, its variant rambunctious 1854, rumgumptious 'quarrelsome' (ADD), bumpious 'offensively self-conceited' 1803 (with a play on bump 'protuberance of the cranium as the seat of peculiar mental energy').

Scrumptious 'first-rate' 1836 contains the sf, the root may be, as the OED suggests, a variant of scrimption (f. scrimp) 'small quantity'. Gumptious (acc.
4.70.6. -eous /iəs/.

The words bounteous and plenteous are loans, representing OF bountivous, plentivous. This is also the original English spelling which was, towards 1400, adapted to the words bountie, plente (= PE bounty, plenty). The pattern attracted other derivatives, as beauteous 1440, duteous 1593. The word piteous 1297 is OF pitos. It had various spellings in ME (as pitous, pituious, piteuos, pitevos, also pytewys which seems to indicate that the termination was somehow connected with -wise; on the other hand, rightwise was in the beginning of the 16th c. fashioned into righteous), but from about 1500 the PE spelling prevails. Hideous 1300 is ME hidous (= OF hidous), after 1500 refashioned into hideous, apparently after beauteous. Gorgeous 1495 (repr. OF gorgias, of uncertain origin) received its termination from plenteous. ME courteis (= OF courteis) did not fit into any English terminational pattern, in the 16th c. it was adapted to the -eous group (perh. vaguely in association with beauteous).

Phonologically, bounteous, plenteous, beauteous, duteous, piteous are -ous derivatives from -ty sbs. With speakers who pronounce courteous [kə(r)təs], the form of the sf is [əs]; but for those who pronounce courteous [kə(r)təs] the word is no derivative at all. Similarly hideous and gorgeous are not derivatives as they are unconnected.

4.70.7. Stress: derivatives in -ous have the stress pattern of the underlying theme. An exception is momentous f. moment. Courageous and advantageous have not developed homological stress either. Till the 17th c., as the spelling shows (see OED), they were commonly apprehended as containing the sf -ious and therefore retained the antepenult stress of words in which -ous was preceded by a vowel. Later phonetic changes have not modified the original stress, so the stress is always on the syllable preceding [əs], [təs], [səs], [ərəs], [ərəs].

4.70.8. CL has a great number of adjs in -osus, as annosus, bellicosus, copiosus, famosus, periculosus, a type which was still stronger in popular Latin and increased in LL and ML. The original meaning was ‘full of, abounding in . . .’, but the shade ‘resembling, like . . .’ (as in globosus ‘round, like a ball’) was frequent enough. Such adjs denote a conspicuous, remarkable quality or appearance. Many of the words passed into French where the type was further developed. Beginning with the 13th c., English borrowed words like the ones that have been listed above. The L form -osus became -ous in OF, and this is the form English has preserved, using it also for the rendering of Latin words in -osus. We cannot always tell with certainty whether an English word that has both a French and a Latin pattern is due to one or the other language. We may, however, assume that down to about 1500 the stock of -ous words is of French provenance. For copious 1387, the OED gives L copiosus as the etymon, but the pattern is perh. OF copious 1372. Similarly is studious 1349 prob. OF estudieus, not L studiosus (OED), and fastidious 1440 will
represent OF fastidius (14th c., Bloch). *Fabulous* 1546, *generous* 1588, *sinuous* 1578 have both Latin and French patterns and may be adaptations of either or both. But *sulphurous* 1530 must be L *sulphurosus* as F *sulfureux* is first recorded 1718 (Bloch), and *blasphemous* 1531 is more prob. adapted L *blasphemus* than F *blasphemeus* (which is OF only).

4.70.9. The *sf -ous* has come to be used for the adaptation of Latin adjs which did not fit a terminational pattern in English. It is not, however, enough to say that "in English this addition of the suffix has been greatly developed and has become the ordinary mode of anglicising L. adjs. of many kinds, esp. those in *-eus, -ius, -us, -er, -ris, -ax/aci, -ox/oci, -endus, -ulus, -vorus, -orus*" (OED s.v. *-ous*). The problem is not merely phonetic, but has a semantic side to it, too. Why do we say igneous, but Mediterranean; obvious, but Phrygian; hilarious, but lunar etc.? We must bear in mind the particular semantic shade of *-ous*. With Latin adjs in which the termination is a sf denoting appurtenance (as is the case with the words mentioned immediately above), adaptation by *-ous* is out of the question. On the other hand, such adjs as ambiguous, arduous, conscious, credulous, previous, prosperous, various apparently convey no suggestion of 'remarkable, striking appearance'. In such cases the character of the sf is adaptational. No other sf was free for adaptational purposes: *-al, -ial, -an, -ian* denoted appurtenance and derived from nominal bases whereas adjs of the above kind are units for the speech feeling. For obvious reasons, folks like *-ive or -ory* were quite impossible.

On the other hand, Latin had already paved the way for the extension of adjs by means of *-ous*. We have *dubius CL* and *dubiosus LL, querulus CL* and *querulosus LL, decorus CL* and *decorosus LL, contrarius CL* and *contrariosus ML*. The latter passed into OF, whence into ME where we find it as *contrariosus* 1290. It was perhaps the first step toward the rendering of L *-ius* by E *-eous*. *Dubious* 1548 might be *dubius* as well as *dubiosus*. Other instances of *-ius* adaptations are *various* 1552, *obvious* 1586, *conscious* 1601, *pious* 1602, *abstemious* 1610, *previous* 1625.


4.70.11. T. *superfluous* for L *superflus*: *mellifluous* 1432, *superfluous* 1432; later come ambiguous, assiduous, arduous, conspicuous, strenuous (16th c.), exiguous, lactifluous, contiguous (17th c.). Obs. *monstruous* 1374 is OF *monstrueus*, L *monstruosus*.

4.70.12. Other types are barbigerous for L barbiger (barbigerous 1631, morigerous 1600, lenigerous 1889), carnivorous for L carnivorus (carnivorus, granivorous, herbivorous, ovisorous, piscivorous (17th c. and later), adapt-
tions of NL words with Greek material, as words in -phagous (phytaphagous, sarcocephagous, anthropophagous), -philous (hygrophilous, dendrophilous), -phorous (carpophorous, oophorous, phonophorous), and some more. The sf has never been appended to words in -ific, -iform.

4.70.13. T. erroneous for L erroneous: Latin adjs in -eaus (unless they denote appurtenance to a proper name, in which case they become -ean, see -an sf) show a tendency to be adapted into -eaus. The oldest instance I have is erroneous 1400 (orig. chiefly spelt -ious, -eous). Other exs are MoE, as sulphureous 1552, igneous, ligneous, vitreous (17th c.), argentous 1881. Aqueous 1643 (L aquosus) has joined the group of words with a basis denoting material. They have not, however, been mechanically adapted, but fit the character of -eaus in that they only mean ‘resembling, like ...’, whereas the Latin words also mean ‘consisting of ...’. Latin words in -aneus are represented by obs. momentaneous, instantaneous, extraneous, contemporaneous (17th c.).

4.70.14. Latin adjs in -aceus, derived from sbs in -a, all connected with the subject-matter of biology, are adapted into -aceous, as herbaceous, testaceous, crustaceous, cretaceous, coriaceous, farinaceous, membranaceous (all 17th c.), avenaceous, fabaceous, rosaceous (18th c.). In the terminology of Bot. and Zool., some words in -acea (animals) and -aceae (plants) became established as names of classes, orders, or families, and adjs in -aceous acquired a derivational connection with them. The alternations are of the type crustacea/crustaceous [eso/eso] resp. rosacea/rosaceous [eso/eso].

4.70.15. L adjs in -ax are anglicized in -acious. By the side of CL fallax there is a LL fallaciosus which passed into OF as fallacious (1327, Bloch). OF audacious (1327, Bloch) has perhaps also an unrecorded Latin pattern. The English words, however, are not recorded before the 16th c.: fallacious 1509, audacious 1550. Their ambivalent character established the possibility of forming other adjs in -acious to render L adjs in -ax. 17th c. words are capacious, contumacious, mendacious, pugnacious, logquacious, tenacious, vivacious, rapacious, voracious. More recent is edacious 1819. Predacious 1719 does not have a Latin pattern, but is formed after rapacious.

4.70.16. The termination -acious has jocularly been used in obstinacious 1830 and splendacious 1843 (the latter stem has been the source for various attempts of a similar kind: obs. splendidious 1432, obs. splendidous 1605, splendidiferous 1843); curvaceous AE is not jocular, however.

4.70.17. The pattern of -acious was followed by -ocious [oeso] to render L adjs in -ox. The use is not older than the 17th c. Exs are ferocious, atrocious, precocious (17th c.).

4.70.18. Some Lat. adjs in -orius which fitted the semantic shade ‘outstanding quality’ were anglicized in -orious: meritorious 1432 ‘full of merit’ (orig. in a theological sense), notorious 1548 (after famous), censorious 1536 ‘addicted to censure, fault-finding’. But the usual adaptation of L -orius is -orial or -ory (see the respective sfs).
4.70.19. Latin adjs in -arius are usually adapted in -ary or -arian (see the respective sfs). For reasons similar to the ones concerning -orius, a few adjs have coined the sf -ous: contrarious 1290 repr. Of contrarious which is ML contrarious. Later are temerarious, nefarious (16th c.), gregarious 1688. All the words apply to striking quality or appearance. The group was joined by hilarious 1823, on semantic grounds (the Latin being hilaris). In precarious 1646 and vicarious 1637, however, the sf has obviously a merely adaptational function.

4.70.20. I give a list of adjs where -ous has an adaptational function, chiefly rendering L -us, but also L -is, Gr -os: acclivous, garrulous, querulous (or LL querulosus), sonorous, decorous (or LL decorosus), raucous, grandiloquous, tremendous, stupendous, all L -us / lugubrious, illustrious (L -is) / atheous, analogous, acephalus, arthropodous, amphibious, blastocarpous, prognathous and numerous other words belonging to natural history, repr. Greek adjs in -os, also latinized in -us.

4.70.21. In the terminology of chemistry, -ous is appended to names of elements, denoting a valence lower than that denoted by -ic, as in chlorous, cuprous, ferrous, nitrous etc. This use is a conscious revival of -ous as ultimately representing -usus denoting an abundant quality. But -ous is a quite independent formative here, the Latin words not ending in -ous. L ferreus, ferrugineus, cupreus etc. (also in more general use merely adapted as ferreous, ferrugineous, cupreous) were new-coined in English, on a NL basis of coining.

Adjs of a more general character, formed on a NL basis, are sensuous, contemptuous, abdominal, multitudinous, platitudinous, stertorous, vulturous, stressing outstanding quality or appearance.

4.70.22. In the nomenclature of zoology, adjs in -ous are formed from sbs of classification, as amphibious (f. amphibia), struthious (f. struthio 'ostrich'), terricolous (f. terricola 'the class of earthworms') a.o. Here, the sf merely expresses the meaning 'belonging to the class of ...' The sf has the same character in the above mentioned derivative adjs from classification sbs in -acea, as crustaceous 'belonging to the class of Crustacea' etc. (zoology), rosaceous 'belonging to the Rosaceae' (botany).

4.70.23. Most Latin-coined adjs in -acious are matched by sbs in -acity (except efficacy, fallacy and contumacy) as their derivatives on a NL basis of coining. Parallel are adjs in -icious (4.70.17) and their L derivatives in -icity. Cp. also 4.1.27. On a native basis of coining both groups derive sbs in -aciousness resp. -iciousness.

4.70.24. edema/edematous. NL words of Greek origin in -ema (in E chiefly stressed on the penult), denoting abnormal states of tissue, derive adjs in -ematous ([ematos] or [inmatas]). Exs are eczema, emphysema, erythema, exantheme / eczematous, emphymatous, erythematous, exanphematos.

4.70.25. carcinoma/carcinomatous. NL words in -oma [omæ], denoting a pathological cellular state, chiefly cancerous or tumorous, derive adjs in -omatous ([omatas] or [inmatas]). Exs are enchondroma/enchondromatous, epithelioma/epitheliomatous, fibroma/fibromatous, glaucoma/glaucomatous etc.
4.70.26. blasphemy/blaspheemous. Many words in -y, being adapted NL words in -ia composed of Greek elements, derive adjs in -ous on the correlative basis -y/-ous (cp. -y/-ic 4.43.6—8). Exs of alternations are analogy/analogous (beside -ic), homology/homologous (esp. in chemistry, biology; also homologic(al)), monotony/monotonous, synchrony/synchronous (beside -ic, -ical), cacophony/cacophonous, homophony/homophonous (beside -ic; but euphony alternates with -ic, -ical, -ious), -latry/-latrous words, as idolatry/idolatrous, monolatry/monolatrous, -phagy/-phagous words as andro-, anthropo-, monophagy/-phagous, -gyny/-gynous words, chiefly used in botany and zoology, as andro-, mono-, tetra-gyny-gynous, -andro-/androus words chiefly in botany and zoology, as gyn-, tri-, poly-andro/-androus.

We have the same alternation with a few loans from French, as in adultery/ adulterous, lechery/lecherous, treachery/treacherous.

4.70.27. -itus appears in form -ose only in Latinisms, i.e. coinages on a NL basis. In rare cases such Latinisms look analysable on a native basis, as in globose f. globe, gummoso f. gum in BE, but they have been homologically actualized in AE where the stress is globose, gummoso.

4.71.1. -ship /ʃip/

forms denomin sbs, chiefly from personal nouns, with the basic meaning 'state, condition'. The sf goes back to OE -scipe, -scyppan and has parallels in other Germanic languages. The root is the same as that of OE scyppan 'shape, G schaffen'.

4.71.2. From the OE period have survived the words earlship, friendship, lordship, reeveship, township (desubstantival), worship (OE weorhscipe = worthship) which is, however, a moneme for the present-day speaker. Survivals from the ME period are not numerous either: fellowship 1200, ladyship 1225, workmanship 1375 / hardship 1225 are the oldest words recorded while others are not older than the 15th c., as captainship, heirship, keepership, neighborship, protectorship, wardship. The majority of words in common use are 16th c. and after. Exs are championship, clerkship, clientship, clownship, companionship, countship, deanship, dictatorship, doctorship, fathership, generalship, governorship, guardianship, justiceship, kinship, lectureship, majorship, matronship, membership, pastorship, primateship, queenship, rivalship, saintship, showmanship, sonship, squireship, statesmanship, studentship, tenantship, trusteeship, tutorship, twinship, vicarship, viziership.

4.71.3. With personal sbs the sf conveys the abstract meaning 'state, condition of...; being...'. In a few cases the sf is added to an abstract sb, as in cleryship, lectureship, kinship, courtship, but the implication is that of the first group, as if the basis were cleryman, lecturer, kinsman, courtier resp. the agent sb courtier. According to the character of the basis, the implication with sbs derived from personal sbs may also be 'office, dignity, rank of...', as in ambassadorship, captainship, corporalship, majorship etc., often including the connotation of the emolments pertaining to the position, as in fellowship, scholarship, headmastership, postmastership a.o., in later use more often 'func-
tion, office', as in trusteeship, editorship (both 18th c.), 'position, role', as in leadership 1834, dictatorship, or 'institution, régime', as in censorship, dictatorship. In some derivatives from agent sbs the sense expressed is sometimes rather than of action', as in censorship 'supervision', editorship 'superintendence'. This is natural as an agent is connected with an underlying action (though a verb from the same stem as the agent sb may not be in existence). This is also the basis of the t. workmanship below, and of courtship 'courting'.

4. 71. 4. Ladyship, lordship, worship, preceded by a possessive pronoun are used as respectful designations or forms of address. For ladyship the first record is from 1374 (Chaucer), for lordship from 1489, but used as a title, without a possessive pronoun, as early as Old English, then to render L dominatio (the title of an order of angels), for worship from 1548 (occasionally also without a pronoun). Cp. the use of other abstract sbs as titles, as Majesty, Grace, Highness, F Altesse, G Hoheit etc. This use has been imitated for the coinage of many mock titles, as clowns, curship, haqship, saintship, monkeyship and many others. There are also occasional derivatives from groups, as Master of Artship. The group is one of the strongest in PE.

4. 71. 5. When tacked on to a sb denoting a professional agent or the like, the cbs often have the connotation 'skill, art'. This sense group is MoE. Exs are workmanship 1529 H, horsemanship 1565, scholarship 1589 H, coachmanship, craftmanship, markmanship, penmanship, showmanship, statesmanship. This seems to be the only productive type today.

4. 71. 6. Old English had several collective nouns, denoting a community, as folscipe, fèodscepe 'nation', hëwscipe 'family'. Of the group, only township, OE tuincipe 'the inhabitants of a town' has survived, and few words have been coined. Fellowship 'body of fellows' (in various senses) 1290 is obsolete or archaic now. In use are partnership 'firm', membership, trusteeship 'body of . . .'. It has recently produced countless words, partly humorous, such as buyanship, salesmanship, groommanship, gamesmanship, lifemanship, brinkmanship (the reader will find many words in Stephen Potter's books Gamesmanship, Lifemanship and others).

4. 71. 7. Concrete senses have never much developed. OE had wasterscipe 'piece of water', in ME, township and lordship (the latter rare, last quoted 1578) joined the group. Modern is waywodeship 'province of a waywode'. With a different nuance we have fellowship and scholarship 'allowance of . . .'.

OE and ME formed derivatives from adjs and participial adjs also. The only survivals are hardship 'hard condition' 1225 and worship OE.

4. 72. 1. -some /som/

is OE -sum (= G -sam), from the same stem as same. It forms adjs from sbs, adjs and vbs, meaning '... like, characterized by . . .', apt to . . .'. The type has parallels in other Germanic languages.

4. 72. 2. In OE, the majority of derivatives were denominal. No deverbal adj has survived into the ME period. Survivals of OE derivatives are winsome (f. OE wyn 'pleasure'), lovesome, lonesome. The first is no longer analysable as
a derivative, as the root does not exist as a word in PE, the two others are archaic or dialectal now. The oldest recorded deverbal adj is **buxom** 1175 (f. stem of būgan ‘bow’), a moneme for the PE speaker. The ME period was very productive. Exs are gamesome, **handsome** / **jovial**, gladsome, **lightsome** (both ‘merry’ etc. and ‘luminous’, *loathsome*, wholesome, **wearisome** / **cumber-some**, **irksome**, noisome (f. apheretic annoy). Words recorded from the 16th c. are burdensome, awesome ‘weird’, dangersome, dolesome ‘sorrowful’, **healthsome**, heartsome, laborsome, **lifesome**, quarrelsome, timorsome, toilsome, troublesome, **toothsome** / **brightsome**, **darksome**, **ugglesome** (f. obs. uggle ‘ugly’) / **hind-some**, **tiresome**. Many of them are now dialectal or archaic. Many adjs recorded from the 17th c. belong to the semantic field of ‘pleasure’, as **frolicsome**, **gaysome**, **gleesome**, **humorsome**, joysome (rare), **laughsome** (rare), toysome ‘playful’, playsome. To other fields belong **furthersome**, **venturesome**, lonesome, meddlesome. Later are **lithesome** 1768 (after **handsome**), its variant lissom 1800, **pranksome** ‘frolicsome’ 1810, **fearsome** 1768, **frightsome** 1817 (after **timorsome**), **bothersome** 1834, **plaguesome** 1828, shuddersome 1839, dial. **worrisome** 1869, **tempersome** 1875 ‘quick-tempered’, **pestersome** ‘bothersome’ **AE** 1843, **wranglesome** / **quarrelsome** 1817.

4.72.3. The now prevailing shade of meaning is obvious from the 19th c. words (it is interesting to note the contrast between the 17th and the 19th c. coinages) though words in nonce-use or of regional occurrence occasionally have another character: **daresome** 1864 follows **frightsome** and **timorsome**, **tedioussome** 1824 is in keeping with the general 19th c. tendency, frothsome 1880 seems to be poet. Jespersen (VI. 25. 25) quotes chucklesome and jumpsome, the OED (s.v. **-some**) cites clipsome, cuddlesome, dabblesome, divertsome, in the ADD I find such words as **curioussome** ‘curious’, gonesome ‘hungry’, queersome ‘queer’, retchesome ‘nauseating’, sweltersome ‘sweltering’, tellsome ‘talkative’, youthsome ‘youthful’.

The sf seems to have lost its productivity for deadjectival coinages while the deverbal type has grown in importance, the derivatives meaning ‘apt to or apt to cause to . . .’.

4.73. Type **twosome**. The sf **-some** is found with a few cardinal numerals: **twosome** 1375 (chiefly Sc), **threesome** 1375 (Sc), **foursome** 15 . . , conveying the meaning ‘. . . together’. Historically it represents OE *sum*, the indef. pronoun, PE some “after numerals in the genitive plural . . . In ME. the inflexion disappeared, and the pronoun was finally treated as a suffix to the numeral” (OED s.v. **-some**, suffix ²). Cp. such a passage as Beow. 207: *fiftiēna* *sum* ‘fifteen together’.

4.74.1. **-ster /ste(r)/ ¹**

 goes back to OE **-estre** whose origin has been much disputed. According to Jespersen the suffix was originally neutral to the distinction of sex but denoted the male and the female actor indiscriminately. On the other hand, there is an

overwhelming number of OE words which apply to female agents, as has recently been pointed out by B. von Lindheim. This would rather seem to bear out Kluge's and the OED's view that the original function of OE -estre was to denote the female agent. Neither view can be exactly proved or disproved. As many occupations could be performed by both men and women, the suffix came to be neutral with regard to the expression of the concept of sex. This was the state of affairs as far back as OE. The productivity of the suffix in Old English seems to have been restricted to the southern dialects (von Lindheim). The history of the suffix during the ME period still needs clarification. In modern times, derivatives in -ster have only denoted male persons. At present it is impossible to tell how the change came about. Old and Middle English glossarists usually rendered Latin feminines by -estre words. Spinster (formerly also denoting a man) 1362 is the only survival of a feminine in StEnglish while sewster is Scotch. With the restriction of the sf in Modern English came a change of pattern for the formation of female agent substantives. It became possible to add the sf -ess when indication of sex was intended, as in backstress 1519 obs., seamstress 1613, songstress 1703.

4. 74. 2. Exs are seamster, webster, songster, tapster (OE), brewster, dempster ‘judge’ = doomster, dryster ‘one employed in drying something’, huckster, mallster ‘one who makes malt’, throwster ‘one who twists silk’ (ME). From the 16th c. are recorded gamerster, obs. bangster ‘bully’, hackster ‘cut-throat, prostitute’ (obs. or dial.), whipster ‘wanton p.’ (the root is not quite clear), youngster, lewdster (Sh). The 17th c. is unproductive: deemster 1611 is a variant of dempster and doomster. Most of the 16th c. coinages already had a depreciative character, and it is with this tinge that the majority of 18th and 19th c. words were formed, as punster, trickster, dabster, rhymester (all rec. from the first two decades of the 18th c.), fibster, skyster, daubster, jokester, tipster (after gamester), ringster ‘member of an political ring’ AE 1881, gangster 1896 (orig. U.S.), other recent words, most of them Americanisms such as funster, crookster, prankster, mobster, dopester, boomster, bankster. The taint of the sf is old, as we see, not due to gangster, as Jespersen says (VI. 15. 12). Very recent is AE crimester ‘organized perpetrator of crimes’, formed after gangster. The characteristic nuance of the sf is now that of ‘shadiness’.

4. 74. 3. Untainted words are roadster 1744, orig. applied to a ship, then also to a horse, a man, a vehicle, oldster (after youngster), teamster 1779 orig. ‘man who drives a team’, bandster 1794 ‘one who binds sheaves’, homester 1891 ‘contestant in a match who belongs to the local team’, the recent AE pollster. In recent AE there are several more words in -ster (see MeAL^4 178 and Spl I. 360) which are not current, however.

4. 74. 4. Lobster, OE lopustre, loppester is usually said to represent L locusta. This accounts neither for the sense nor for the form. Barrister 1545, today a moneme, may belong here, as derived from bar. One of the early spellings is barrester; but the spelling -ester in the 16th c. also occurs with gangster, huckster a.o. The form barrister is likewise recorded from the beginning, and has prevailed, perh. after legister and sophister (see sf -ister 4. 53).
4. 74. 5. Derivatives have always chiefly been denominal. The OED (s.v. -ster) considers the sf a deverbal formative. But seamster, webster, songster, OE lybbestre (f. lybb ‘poison’) are denominal coinages. From the role of -estre as a frequent counterpart of deverbal -er, the sf acquired a deverbal character, too. MoE are predominantly denominal, in the main desubstantival. The derivation of shyster ‘tricky lawyer’ AE, however, is somewhat doubtful.

4. 75. -th /θ/

is a substantival sf with a few coinages of doubtful currency. Productive in OE and ME (health, wealth, depth, strength, length etc.), it has in the MoE period formed deverbal growth 1557 and spilth 1607. Breadth 1523 (no derivative for the present-day speech-feeling) is extended from now obs. brede (OE brādu), influenced by length, and was followed by width 1627 (dialectal widness with a change of suffix rather than ‘a literary formation’ (OED), as original [i:] had, by 1627, long become a diphthong. Coolth 1547 (now chiefly coll. or joc.) was coined after warmth. Illth 1860 is “used by and after Ruskin as the reverse of wealth in the sense of ‘well-being’: Ill-being” (OED). Horace Walpole coined the word greenth, and Wentworth quotes louth as used by Bacon.

4. 76. -ton /tɒn/

has formed a few exocentric sbs with the basic meaning ‘fool’, as skimmington 1609 (the figure of an ill-used husband, prob. fr. skim-, as in skimmed milk), simpleton 1650, dial. idleton (with -ton in a merely individualizing function). The sf is parallel to -by (see there), and obs of the kind arose in jocular imitation of place-names used as surnames, as Middleton, Muggleton, Newton (cp. Jespersen, Linguistica 417/418 and VI. 25. 43), but the particular circumstances which led to the choice of -ton and -by remain in the dark. On the other hand, the much newer word singleton ‘one card in hand; one single thing (as distinct from a pair)’ 1876 is of another kind than the preceding examples. It has attracted doubleton ‘two cards’ 1906.

4. 77. 1. -ure

is a weak sf which has formed several words, chiefly from stems ending in -t and -s. The oldest E words in -ure are loans from French, as jointure 1374, pressure 1382, closure 1386, lecture 1398 a.o. or Latin, as mixture 1460, stricture 1400, structure 1460 a.o. Pressure and lecture may represent both F pressure, lecture and L pressura, lectura, but the form of the English sf is French. After closure, English has formed enclosure 1538 which attracted dispose 1569, composure 1599, exposure 1606. Pressure was followed by obs. expressure 1598 and impressure 1600 (rare). Mixture attracted fixture 1598 and prefixture 1821. The loan capture 1541 (= L captura) attracted rapture 1600, rupture 1481 (L, F) gave rise to disruption 1756, jointure was followed by disjointure 1757.

4. 77. 2. On the analogy of closure/close, pressure/press several deverbal coinages have been made from English verbs (in addition to the preceding ones in -asure and -pressure), as obs. vomiture 1598, obs. prasure 1622, obs.
raisure 1613, obs. cleiture 1545, obs. bankrupture 1617 (after rupture), all short-lived words, erasure 1734. Roundure 'roundness' 1600 is poetic, licensure 'a licensing to preach' 1846 is AE only. Departure 1523 and wafture 1601 are the only common words of the group. Failure 1643 is fr. AF, i.e. Law French faileir = F faillir, which has joined the spelling group of the sf.

4. 77. 3. Declinature 'declination' etc. 1637—50 is Latin-coined *declinatura. The word is analysable as decline plus -ature, but a suffixal type has not developed from it.

English borrowed prefecture 1577 (L or F), prelature 1607 (ML or F), candidature 1851 (F) so there is now a derivative relation between them and prefect, prelate, candidate, but no English coinings have sprung from the pattern.

On the analogy of coverture ME (OF), disjuncture 1400 (ML, OF), rapture analysed as adj plus -ure, English has coined crenature 1816; but this is as far as the type goes.

The loan quadrature 1553 (L) attracted cubature 1679. This latter and curvature 1603 (L) are analysable as cube resp. curve plus -ature; but again this has not led to coinings after the pattern.

4. 77. 4. Treasure (= OF tresor) 1154, leisure (= OF leisir) 1300, and pleasure (= OF plesir, plaisir) 13... had various forms of spelling before they definitely joined the spelling group of the sf. The reason for the spelling seems to be chiefly phonetic, i.e. the -s analogy of other words (closure, censure, measure, pressure etc.); see Jesp. I. 2. 735.

4. 77. 5. Derivation in -ure from stems ending in [z] and [s] implies the phonological alternation [z/ʒar] resp. [s/ʃar]. The sf is otherwise pronounced [ʃə(r)] or, after t, [ʃə(t)].

4. 78. 1. -ward, -wards /wə(r)d/, /wə(r)dəz/

is a sf expressing direction toward... Both forms were sfs as far back as OE. The stem is the same as we have in L vertere (cp. Romam versus 'Roman-ward') and G -wärts (vorwärts etc.). Cbs are formed on the following types: 1) inward (the first-word is a locative particle), 2) northward (the first-word is the name of a cardinal point), 3) homeward (the first-word is a common sb). All types are OE.

Exs are 1) inward, outward, upward, onward, afterward, toward*. Adverbs of place which do not belong to the primitive group of locative particles, were originally prefixed with a: adənwærd OE, awayward 1205, abakward 1205, but from about 1200 we find them without the prf: dowward 1200, backward 1300, voyward 1380, awkward 1340 (obs. awk 'in a wrong direction, untoward'), leftward 1483.

2) eastward, southward, westward, northward OE, north-westward ME, north-eastward 1553 etc.

3) homeward(s) OE, sideward 1430. This use is chiefly 16th c. and later; and in PE the sf can be tacked on to practically any word. We find obs such as beautyward, chimneyward, doorward, earthward, godward, heavenward, lobbyward, landward, seaward. However, these words are not in common use.
4.78. 2. There is also the phrasal type ‘to . . . ward’ which goes back to OE. The type is commonly used with sbs, pronouns, and proper names down to the 17th c., but today cbs of the kind sound archaic. Exs are to the westward, northward etc. (Kipling, Wells), to windward (Hemingway), to our country ward, to him ward, to London ward (OED).

Combinations with locative particles have, on principle, always been both adjs and adverbs. On the other hand, the OE form -ward was already matched by the form -wardes which is purely adverbal. In PE, -wards is used when the action is qualified as to manner. By a sentence such as the crayfish moves backwards we refer to the manner of moving of the animal, and write backwards has a similar implication. We could hardly say “Come *forwards!” as mere direction is meant, in which case -ward is regularly used (see also OED s.v. -wards).

4.79. 1. -y /1/

is a sf which originally formed denominal adjs. It goes back to OE -ig, and the derivational type has counterparts in all Germanic languages. In OE there are only adjs derived from sbs meaning ‘full of, characterized by . . .’. To the oldest stock belong such words as bloody, cloudy, jenny ‘swampy’, foamy, guilty, hungry, icy, mighty, misty, moody, rainy, sandy, sappy, speedy, thirsty, watery, windy, witty, dizzy*, empty*, heavy*, holy*, pretty*. From the ME period are recorded such words as angry, bunched, dusty, earthy, fatty, faulty, fiery, flamy, flowery, gemmy ‘abounding in gems’, gory ‘covered with gore’, gouty, hairy, hearty, juicy, lousy, milky, pearly, shadowy, stormy, wealthy, woody, naughty*. From later times date bony, chilly, crazy, dirty, feathery, ferny, fishy, flaky, fleecy, foxy, frisky, frumpy, gloomy, glossy, greasy, handy, healthy, heathery, jointly ‘having numerous joints’, knobby, leafy ‘abounding in leaves’, leathery, limy, lumpy ‘full of lumps’, meaty, moony ‘moon-shaped, stupidly dreaming’, mothy ‘infested by moths’, plaguy, pulpy, shady, shiny, steely, sunshiny (16th c.), choppyy ‘full of cracks’, creamy, dampy, draughty, drizzly, filmy, flaxy, furry, grimy, locky, measly, nervy, nosy, nutty, pasty, rickey, silky, soapy, spleeny, stringy (17th c.), dressy, edgy, flawy, fringy, funny, glazy, hummocky, humpy, ledgy, meaty, patchy, pillowy, shingly, tindery, wispy (18th c.), cheeky, classy ‘superior’ sl, cushiony, fluffy, fluty, goosey, gossipy, jerky, jungly, lacy, lardy, loopy, messy, mousy ‘quiet; infested by mice’, newsy, plucky, pockety, risky, spidery, summery (19th c.), artly 1901, matey ‘sociable’ 1915, sexy 1928. The preceding list is only a selection. There are infinitely more derivatives as the type is very productive.

4.79. 2. Deverbal derivatives have occurred since the 13th c., but are not frequent before the MoE period. In the Ancren Riwle are found slibbri, sliddri, sluggi, slummi, droopy, in Chaucer worldly ‘agile’, sleepy ‘soporific’. The following are recorded later: choky, crumbly, nippy, drowsy, slippy (16th c.), floaty, speawy, a term of agriculture, sweepy (17th c.), clingy, creepy, fidgety, peery, shaky, shattery, shivery, sticky, sulky, slmy (18th c.), blowy, crawlly, croaky, croaky, dashy, floppy, laughy, loopy, mopy, perky, poky, raspy, scattery, snappy, splasty, squeaky, stragglly, stretchy, swimmy ‘inclined to dizziness’, tottery, weepy, wiggly a.o. (19th c.), squiggly, wiggly (20th c.).
4.79.3. The meaning of desubstantival derivatives is 'full of, abounding in, covered with, like...'. Beginning with the 18th c., the sf has shown a tendency to form words of a colloquial, slangy character. This slangy tendency has grown exceedingly since the 19th c. which accounts for such words asarty, beery, catty, churchy, nosy 'who pokes his nose into other people's concerns', piggy, panicky, oniony, fishy 'improbable', shady 'disreputable', dodgy, potty = dotty = balmi = nutty = dippy 'crazy' etc. Horsy and doggy have developed the sense 'addicted to... ', recorded since about 1850. The meaning perh. originated in connection with races. Otherwise, the sf is rarely tacked on to names of animals. With personal sb's, the sf is not used at all.

The meaning of deverbal adjs is 'having a tendency to, given to, inclined to... '. The colloquial or slangy tendency characterizes them as well as the desubstantival derivatives. Cp. recent batty 'crazy' 1922.

4.79.4. Although derivation from adjs is Indo-European (see Wi 345), there are no English words before about 1400. Exs are moisty 1356, crispy 1398, obs. leawy 14... , obs. huggy 1420. From the 16th c. are recorded haughty*, fainty (now poet. or dial.), blacky, whitly, greeny, paly, dusky, vastly, later are bleaky, lanky (17th c.), pinky, purply (18th c.), goody 1810, bluesy 1802. The sense conveyed is 'some-what, suggesting... '. The type is weak, -ish being the stronger rival of the sf. Slippery 1535 is adapted from the now dial. slipper (OE slipor).

4.79.5. There are comparatively few derivatives which have more than two syllables, and there are no derivatives from other than everyday words. This is probably one of the reasons for the development of the colloquial and slangy character of -y words. Derivation from composites is uncommon. Jespersen (VI. 13. 32) has nonce-words such as moon-beamy, goosefleshy, headaky, open-airy, other-worldy a.o.

4.79.6. Busy OE and lazy 1549 are of unascertained etymology. The verb lase 1592 is backderived from the adjective. For the phonological alternations of the fricatives in worthy/worth, scurvy/scurf, lousy/louse see 4.1.22—23.

4.79.7. -sy /sl/

The sf -y has a by-form -sy. The sf may have originated in cases of -y tacked on to a plural (as in tricksy fr. tricks) or a word ending in -s (as bousy fr. bouse vb), but it may also be simply playful (op. dimin. -sie , 4. 45. 4). Exs are bousy 1529, tricksy 1552, tipsy 1577 (perh. fr. tip in tipple, i.e. a variant of tap), perhaps pudsy 'plump', the AE words woods, backwoods, folksy, bitsy. Flimsy 1702 is unexplained. It may contain the same symbolic element as we have in film-flam (the OED thinks of derivation from film). Limpsy 1825 is in BE a playful derivative from limp, while in AE it is synonymous with flimsy. Slimsy 1845 'flimsy, frail' is a blend of flimsy and sl (as in slump, slip; there is app. no connection with slim). The common denominator of flimsy, limpsy, slimsy is 'frail, without strength'. Clumsy 1598 appears to be derived from obs. vb clumsse 1360 'be or become stiff with cold'. Drowsy 1530 is unexplained; it may be a blend of droopy and bousy (op. the first quotation for bousy in the OED from Skelton: Droupy and drowsy, Scurvy and lousy; Her face all bousy). Frousy 1681 also is of uncertain etymology.
The adjectival sf -y has a by-form in -ety, -ity, -dy, -ty which is used in popular speech and slang. The ADD quotes such words as biggity, biggety ‘conceited’ (the only instance of an extended simple adj, as far as I can see), mingledy ‘mingled’, scaredy-cat ‘timid person’, wrinkledy ‘wrinkled’, raggedy, raggety ‘ragged’, jaggedy ‘jagged’, snickety = persnickety = pernickety, shackley = shackledy = shackly, rickety, ramshackley, wadgetty ‘fidgety’ (blend of waddle and fidgety), mizzlety ‘drizzling’, stripety ‘striped’, itchety ‘uneasy’, streakity-strikety, wibblety-wobblety ‘unsteady’, fratchety ‘irritable’ (fr. vb fratch).

The extended sf, as we see, is added to verbal stems, but is very often merely a variant of the second ptc. When tacked on to a nominal stem, it appears to be a variant of the possessive adj (ragged, jagged), i.e. the -ed and the -y form are blended. Scotch forms, in which StE and StAE -ed appears as -it (sleekit ‘sleeked’, strippit ‘striped’), may have influenced or caused the rise of the sf. Jespersen (VI. 25. 29) supposes that -ety derives from adjs where it is genuine, as rickety, snippety. We may add fidgety 1730 and crotchety 1825. Pernickety 1808 ‘cranky, crotchety, fussy’ is orig. a Sc. word, but its etymology is uncertain. It fits into the group semantically, however, as the words all denote some striking shape or appearance, chiefly with a disparaging tinge. On the other hand, we have the same di or ti, if I am not mistaken, in old playful rime combinations as higgledy-piggledy, hoity-toity, humpty-dumpty, hobbledehoy, hoberdidance, hobidy-booby, flibbertigibbet (16th and 17th c.), clipperity-clapper, tippery-tap, flipperty-flopperty, jiggety-joggety, lickety-split, clickety-click, clackety-clack, bumpety-bump, uppity-up, nippity-tuck ‘a narrow escape’, cripplety-crumplety, crinklety-cranklety etc. where the extension is by no means clear. Perhaps there is at the root of the extension a symbolic character of [du], [ti], the one underlying ding-dong, tick-tack (see 7. 41; 7. 45).
IV. SUFFIXATION

SEMI-SUFFIXES

4. 80. 1. By this term I understand such elements as stand midway between full words and suffixes. Some of them are used only as second-words of cpds, though their word character is still clearly recognizable.

4. 80. 2. -like /laik/

is the adj (in adverbial formations the adv) like, so cbs with like are originally adjectival cpds of the type headstrong. Like as a semi-sf is isolated from the full word in that we can form cbs of the type unmanlike which would be impossible if -like were still a full word. Cbs with -like have the meaning 'like, resembling, having the form or appearance of, befitting ...'. Cbs are practically ad libitum. Exs are manlike, apelike, beastlike, godlike, gentlemanlike, kinglike, ladylike, snake-like, tigerlike etc. etc. Ad hoc cbs often take a hyphen, as bagpipe-like, drone-like, heaven-like, lawn-like, statesman-like a.o.

The earliest exs (as quoted in the OED) date from the 15th c.: circelike 1420, chieftainlike 1470, devillike 1470. From the 16th c. are recorded bishoplike, godlike, fleshlike. The first instance of a cb with a proper name is Dardanapple-like 1607, but the type is now quite common.

From the 16th c. we find cbs of the type used as adverbs. The use is now 'obsolete or at least archaistic' (OED). Early exs are bishoplike, fellowlike, gentlemanlike, phraselike.

The type unmanlike is recorded from the second half of the 16th c. Exs are ungospellike 1574, unmannerlike 1579, unwarlike 1590, ungentlemanlike 1592, unchristianlike 1610, and later unworkmanlike, unseamanlike, unsportsmanlike, unstatesmanlike, unphilosophic, unlovelike, unloverlike, unladylike, unsummerlike, unbusinesslike.

Less common in StE (exc. Sc.) are cbs with adjs, as bold-like, gentlelike, grim-like, human-like, innocent-like, old-like. Very early is such-like 1422, in form swilk-like 1400. The type is very productive in colloquial and esp. in vulgar speech where it is also tacked on to phrases such as out of her mind like, in a hurry like (see Jesp. VI. 23. 12).

4. 80. 3. -worthy /wɔr(ə)θi/

The case of -worthy is similar to that of -like in that both are adjs historically. Though many cbs have been formed since the OE period (s. OED s.v. -worthy), only a few have gained real currency: blameworthy 1387, noteworthy, praiseworthy (16th c.), seaworthy, trust-worthy, newsworthy (19th c.). Since the 19th c., negative adjs have been in use, but only unseaworthy 1820, untrustworthy 1846, and unpraiseworthy 1876 occur. Newsworthy is recent.

The semi-suffixal character of -like and -worthy is made apparent by the fact that adjs which they form can be prefixed by un-. Compound adjs cannot be prefixed (cp. 3. 63. 10).
4. 80. 4.  -monger /mæŋə(r)/

is OE mangere, agent sb from mangian ‘trade’, as in cheesemonger, fishmonger, ironmonger. From the 16th c. on -monger has been used for the coined of disparaging words only. The use appears to have started in the ecclesiastical sphere with words such as whoremonger 1526 (Tindale’s translation of fornicator, Eph. 5.5), meritmonger 1552 (Latimer, Sermons), pardonmonger 1570, holy watermonger 1550. Later exs are fashionmonger, moneymonger, newsmonger, prophecymonger, panicmonger, scandalmonger, scaremonger, verse-monger, and warmonger, a favorite propaganda word in recent years. In independent use monger is now rather uncommon.

4. 80. 5.  -way, -ways /we/, /wez/

is an adverbial suffix with the meaning ‘in the ... way, wise, manner’, ‘in the direction of ...’. The origin of these suffix formations are compounds with way for a second-word, -ways representing the genitive. Most words occur in either form, but the -s word is more usual. The -way words may be used as adjectives while those in -ways are adverbs only.

The only word that goes back to OE is alway (ealne we) (1300). The rest are EMES and later.

The types are: 1) anyway(s), 2) longway(s), 3) sideway(s). The two first are dead now; new combinations are possible only on type 3). Most words have parallel formations in -wise.

  t. anyway(s) (= pronoun as first-word): otherways (12th c. oðres weges), always, noways (= alles weis, nanes weis early 13th c., in present-day form 14th c.), o. everyways 1398, someway, anyways, o. likeways 16th c.;
  t. longway(s) (= adjective as first-word): beg. 16th c.: straightway (as two words 15th c.), longways, o. likeways, broadway;
  t. sideway(s): beg. 16th c., with the exception of needways ‘necessarily’ (1300): edgeway, endway, crossways, lengthways, sideways, sunway, breadthways, sternways.

4. 80. 6.  -wise /waiz/

with the meaning ‘in the form, manner, or the like of ...’, forms adverbs and is, like -ways, orig. an independent word, the same as we have in archaic phrases such as ‘in no wise’, ‘in like wise’, ‘on this wise’, ‘in gentle wise’.

The types are: 1) otherwise, 2) doublewise, 3) clóckwise. Type 1) is dead, type 2) is also practically dead, only occasional coinages occur today. Type 3) however, is strong.

The origin is to be sought in prepositional combinations: OE on scipwisan ‘in the manner of a ship’, ‘like a ship’, on crosse wyse 1377. These combinations are still possible, as in pilgrim wise. From ME on, combinations without a preposition occur: crosswise 1398, cornerwise 1474.

  t. otherwise: such-wise, what-wise, nowise, thuswise;
  t. doublewise: double-wise c 1386, likewise, obs. diverswise, longwise, leastwise 1534, roundwise 1577, squarewise 1545, thwartwise 1589, humble-wise 1592, hooked-wise 1635, teetotalwise 1866, despiteful-wise 1903;
t. clockwise: cornerwise, crosswise, coastwise, endwise, lengthwise, heartwise, sidewise, balloon-wise, festoon-wise, snakewise.

The formations may also be used as adjectives: a cornerwise cloakroom.

4.80.7. Way and wise are full words, so it might be objected that obs with them are cpds. This is correct. But the obs are never substantival cpds as their substantival basis would require; they are only used as subjuncts or adjuncts. Moreover, wise is being used less and less as an independent word and may, as a semi-sf, one day come to reach the state of F -ment (and its equivalents in other Romance languages) fr. L mente, ablative of mens 'spirit, character', later 'manner'. As for -way and -ways, the former has never been strong and is no longer productive, anyway. The form -ways does not seem to be used for new formations either (for the latest word listed above, sternways 1872, the OED has only one instance, s.v. stern). In the sense 'in the direction of ...', -ward has proved the stronger formative, whereas for other nuances -wise is preferred.

-wise itself is somewhat rivaled by fashion which is, however, much weaker. Exs of this use, which is traced back to the 17th c. in OED (s.v. fashion 13 c) are arrow-fashion, baby-fashion, ham-fashion, rabbit-fashion etc.

4.80.8. Two other words may be mentioned which are only alive as second elements of composites, though both appear to be unproductive now. Wort 'plant' (as in banewort, colewort, liverwort) has not been in ordinary use as an independent word after 1650 (see OED). Wright 'constructive workman' survives in compounds such as cartwright, wheelwright, shipwright, playwright, but the independent word has not been in standard use for a long time.
V. DERIVATION BY A ZERO-MORPHEME

The term 'zero-derivation'

5. 1. 1. Derivation without a derivative morpheme occurs in English as well as in other languages. Its characteristic is that a certain stem is used for the formation of a categorically different word without a derivative element being added. In synchronic terminology, we have syntagmas whose determinatum is not expressed in the significant (form). The signifigmate (content) is represented in the syntagma but zero marked (i.e. it has no counterpart in form): loan vb is '(make a) loan', look sb is '(act, instance of) look(ing)'. As the nominal and verbal forms which occur most frequently have no endings and (a factor which seems to have played a part in the coining of the term 'conversion' by Krui-singa) are those in which nouns and verbs are recorded in dictionaries, such words as loan, look may come to be considered as 'converted' nouns or verbs. It has become customary to speak of the 'conversion' of substantives, adjectives, and verbs. The term 'conversion' has been used for various things. Krui-singa himself speaks of conversion whenever a word takes on a function which is not its basic one, as the use of an adjective as a primary (the poor, the Brit-ish, shreds of pink, at his best). He includes quotation words (his "I don't know's") and the type stone wall (i.e. substantives used as preadjuncts, cf. 2. 1. 12). One is reminded of Bally's 'transposition'. Koziol follows Krui-singa's treatment, and Biese adopts the same method. Our standpoint is different. The foregoing examples illustrate nothing but syntactic patterns. That poor (preceded by the definite article, restricted to the plural, with no plural morpheme added) can function as a primary, or that government, as in government job, can be used as a preadjunct, is a purely syntactic matter. At the most we could say, with regard to the poor, that an inflectional morpheme is understood but zero marked. However, inflectional morphemes have a predominantly functional character while the addition of lexical content is of secondary importance. As for government job, the syntactic use of a primary as a preadjunct is regularly unmarked, so no zero morpheme can be claimed. On the other hand, in government-al, -al adds lexical content, be it ever so little: 'pertaining to, characterizing government'. Therefore governmental is a

syntagma while government (job) is not. That the phrase far-off can be used as a preadijunct (the subject of R. Tourbier’s dissertation) is again a syntactic matter. Characterized adverbs do not develop such functions in any case. We will not, therefore, use the term conversion. As a matter of fact, nothing is converted, but certain stems are used for the derivation of lexical syntagmas, with the determinatum assuming a zero form. For similar reasons, the term ‘functional change’ is infelicitous. The word itself does not enter another functional category, which becomes quite evident when we consider the inflected forms.

Derivations dealt with in the book

5.1.2. The derivational patterns which will be treated in this chapter are: loan vb f. loan sb (desubstantival verbs), idle vb f. idle adj (deadjectival verbs), out vb f. out ptc (verbs derived from particles), look sb f. look vb (deverbal substantives). Cf. also 2.34—38.

Endings and derivation

5.1.3. In inflected languages, the derivant and the derivative usually have a characteristic nominal or verbal ending. But, as we have said before (4.1.2—3), endings are not derivative morphemes. When English was still a more amply inflected language, the present types existed, but inflectional differences were more in evidence. Cf. the OE verbs bisceopian, fugelian, gamenian, hearmian; freon (frēogian), grēnian and their respective bases bisceop, fugol, gamen, heARM; frēo, grēne. The question of the subsequent leveling of forms and the weakening of endings has little bearing on our subject. The reader is referred to Jesp. MEG I.6.1—3; 2.425 and two articles by Samuel Moore1. With regard to denominal derivation, however, it is interesting to note that the leveling of endings brought about the loss of distinction in ME between the OE conjugations in -an and -ian. By the ME period, there is only one conjugational type. The -an of ryht-an as well as the -ian of lōC-ian resulted in -en. This reduced the number of patterns for denominal verbs to one.

Derivational connection between verbs and nouns

5.1.4. With respect to both denominal verbs (type loan vb f. loan sb) and deverbal substantives (type look sb f. look vb) we see that as early as Old English a derivational connection existed between the present-infinitive stem of weak verbs on the one hand and the stem of nouns on the other. As for deverbal substantives, there was some competition in the early stages of the language. Like other Germanic languages, Old English had strong verbs that were connected with substantives containing an ablaut vowel of the verb (rādan / rād, bindan / bend, beran / bora). However, this derivational type was unproductive so far back as Old English. The present-infinitive stem of strong verbs came to be felt to represent the derivative basis for deverbal sub-

1) Loss of final n in Inflectional Syllables in Middle English, Language 3 (1927) 232—59; Earliest Morphological Changes in Middle English, Language 4 (1928), 238—66.
stantives in exactly the same way as did the corresponding stem of weak verbs: *ride* vb: *ride* sb = *look* vb: *look* sb. But this contention of Biese's needs qualification: "these facts indicate the resistance showed by strong verbs to the process of converting them into nouns before, owing to the introduction of weak inflections, a distinct idea of a universal verb-stem had been developed" (407). Many of the verbs that derived substantives at an early date have either never had weak forms or the weak forms are rare or later than the substantives. Verbs such as *bite, dwell, fall, feel, fold, freeze, have, grind, hide, make, steal, tread* are cases in point. This goes to show that the existence of weak verb forms is incidental to the rise of a derivational connection between the present-infinitive stem of strong verbs and the stem of the substantive.

This derivational connection is partly due to cases where a strong verb and a substantive of the same root existed in OE and where phonetic development resulted in closely resembling forms for both in ME. OE *fær, færu* was *fare* by the end of the 12th century while the corresponding OE verb *faran* had reached the stage of *fare* or *faren* about the same time. Other examples of pairs are *bidan* 'stay' / *bid* 'delay, dwelling place', *bindan* 'bind' / *bind* 'band, tie', *drincan* 'drink' / *drinc* *drincana* 'drink', *flōtan* 'float' / *flōt* 'place where water flows', *hælpan* 'help' / *help*, *hrēowan* 'rue' / *hrēow* 'rue', *sleowan*, *slepan* 'sleep' / *sleow*, *sleop* 'sleep', *steorfan* 'die' / *steorf* 'pestilence, mortality', *stingan* 'sting' / *sting*, *stēppan* 'step' / *stepe*, *stigan* 'ascend' / *stig* 'path', *gieldan* 'yield' / *gield*. The derivational relations as I have described them were fully established around 1200.

**Zero-Derivation as a 'specifically English' process**

5.1.5. It is usually assumed that the loss of endings gave rise to derivation by a zero morpheme. Jespersen (GS9, §§ 168—171) gives a somewhat too simplifying picture of its rise and development. "As a great many native nouns and verbs had... come to be identical in form...; as the same things happened with numerous originally French words...; it was quite natural that the speech-instinct should take it as a matter of course that whenever the need of a verb arose, it might be formed without any derivative ending from the corresponding substantive" (p. 153). He calls the process "specifically English" (p. 152). As a matter of fact, derivation by a zero morpheme is neither specifically English nor does it start, as Jespersen's presentation would make it appear, when most endings had disappeared. Biese's study shows quite clearly that it began to develop on a larger scale at the beginning of the 13th century, i.e. at a time when final verbal -n had not yet been dropped, when the plural ending of the present was not yet -en or zero, and when the great influx of French loan words had not yet started. I do not think that the weakening of the inflectional system has anything to do with the problem of zero derivation. Stems are immediate elements for the speaker who is aware of the syntagmatic character of an inflected form. He therefore has no trouble in connecting verbal and nominal stems provided they occur in sufficiently numerous pairs to establish a derivational pattern. In Latin which is a highly inflected language, denominal verbs are numerous: *corona/coronare, catena/catenare, lacrima/lacrimare; cumulus/cumulare, locus/locare, truncus/truncare;*
nomen, nomin-|nominare, semen, semin-|seminare, stercus, stercor-|stercorare; liber|liberare, sacer|sacrare, aequus|aequare (examples from Juret 158). In Modern Spanish where we have full sets of verbal endings (though in the declension only gender and number are expressed) both types of zero-derivation are very productive. The weakening of the inflectional system in English, therefore, cannot have much to do with the development of zero-derivation.

5.1.6. On the other hand, it cannot be denied that despite the relative productivity of corresponding derivational types in other languages, the derivative range of the English patterns, esp. that of denominal verbs, is still greater. The explanation of this seems to be that English, unlike Latin, French, Spanish, or German, never had any competitive types. So, whenever a derivation was made from nouns, it followed the one pattern that existed, i.e. derivation by a zero morpheme. The only derivative morphemes PE has for denominal verbs are -ate, -ize, -ify. They have restricted range of derivative force: -ate is latinizing and learned, -ify is learned while -ize is chiefly technical. All three derive almost exclusively on a Latin morphologic basis. The suffixal type dark-en (4. 28) was not originally a adjectival pattern; in any case, it would have and has to a certain extent rivaled the type idle vb f. idle adj only. Derivation by a zero morpheme, esp. the type loan vb f. loan sb, must therefore be considered the norm and is quite naturally very strong in English. In German, there are many competitive types. We have both mutated and unmutated verbs (faul-en, härt-en, draht-en, häut-en). There are also denominal verbs with a derivative morpheme (stein-ig-en, rein-ig-en; with a foreign morpheme telefon-ier-en, lack-ier-en, stolz-ier-en). In addition, German makes use of the prefixes be-, er-, ver-. Such types as ver-rohen, ver-jüng-en, vergrößer-n; er-kalt-en, er-gänz-en; er-leichter-n; be-end-ig-en, be-herz-ig-en, ver-eidig-en have no counterparts in English. English be- has never played a serious role in denominal derivation (see 3. 8. 6—8). Nor has the type em-bed ever become productive to any larger extent. The productivity of the type loan vb f. loan sb seems to be thus reasonably accounted for. The deverbal type look sb f. look vb has been less prolific and is partly bound up with certain syntactic patterns of grouping (see 5. 6. 5—6). For this, we do have competitive patterns. There are the suffixal types arriv-al, break-age, guid-ance, improve-ment, organi-sation and the verbal substantive type writ-ing though the latter has now chiefly the functional role of deriving action nouns proper. This is the reason why so many zero-derivatives from verbs of Latin and French origin, coined during the 15th and 16th centuries, were subsequently replaced by suffixal derivatives in -al, -age, -ance, -ment (cf. also Hertrampf’s lists of about 200 words, p. 38—39). “After 1650 the suffix formations have completely gained the upper hand of the direct conversions of the disyllabic and tri-syllabic words derived from French and Latin verbs” (Biese 239).

**Zero-derivation with loan-words**

5.1.7. As for Latin and French words and derivation from them, there are comparatively few derivatives before 1300 (see Biese 299ff.). French words were for some time felt to be foreign elements and were not ‘converted’ with
the same ease as native stems were. The phenomenon is in no way different from the one we observe with derivation by suffixes. Loan words remain strangers for a time, and it usually takes some time before a derivational type is applied to a heterogeneous class of words. Zero-derivation was facilitated by the co-existence of borrowed sbs and vbs, as anchor vb c 1230 (the OED has doubts, but F ancher is recorded in the 12th c., see Bloch), annoy sb 1230/anny vb 1250, accord sb 1297/vb 1123, account sb 1260/vb 1303, arm sb 1297/vb 1205, array sb 1300/vb 1297, bar sb 1175/vb 1300, blame sb 1230/vb 1200, change sb 1225/vb 1230, charge sb 1225/vb 1297, charm sb 1300/vb 1300, chase sb 1297/vb 1300, claim sb 1300/vb 1300, comfort sb 1225/vb 1290, cost sb 1297/vb 1320, counsel sb 1295/vb 1290, count sb 1325/vb 1325, cry sb 1275/vb 1225, dance sb 1300/vb 1300, double adj 1225/vb 1290, doubt sb 1225/vb 1225, form sb 1225/vb 1297, haste sb 1300/vb 1300, lodge sb 1290/vb 1225, order sb 1225/vb 1240, poison sb 1230/vb 13..., portion sb 1300/vb 1330, rage sb 1297/vb 1300, ransom sb 1225/vb 1300, reign sb 1272/vb 1297, rime sb 1200/vb 1290, rule sb 1225/vb 1225, touch sb 1297/vb 1297, trouble sb 1230/vb 1225, vow sb 1290/vb 1300.

5.1.8. There are quite a few vbs with French roots for which no French verbs are recorded and which may accordingly be treated as zero derivatives: feeble vb 1225/adj 1175, hardy vb 1225/adj 1225, master vb 1225/sb a 1000, poor vb 1275/adj 1200, saint vb 1225/sb 1175. On the other hand, the sb grant 1225 may be derived from the verb grant 1225. It is only after 1300 that the process of zero-derivation is as firmly rooted with French as with native words. Though French originals for later English words may occur, it is just as safe to consider them as derivatives, as centre vb 1610 fr. centre sb 1374, combat vb 1564 fr. combat sb 1567 (or the reverse), guard vb 1500 fr. guard sb 1426 and others.

5.1.9. Words of Scandinavian origin were more easily incorporated than French words, and derivation occurs as early as the 13th c.: trist ‘trust’, bloom, boon ‘ask as a boon, pray for’, brod ‘shoot, sprout’, smithy ‘make into a smithy’ a.o. (see Biese 242).

I will now illustrate the various types.

5.2.1. Type loan vb fr. loan sb (desubstantival vbs)

Many PE vbs go back to OE: answer (andswaru/andswarian), bed ‘prepare a bed’ (bed/beddish), obs. bliss ‘rejoice’ (blōs/blōsian), book, orig. ‘furnish with a book’ (bōc/bōcian), blossom (blōstm/blōstmian), bridge, orig. ‘make a bridge’ (brycg/brycgian), bridle (bridel/brīdlion), bode (boda ‘messenger’/bodian ‘announce’), borrow (borg ‘pledge’/borgian), care (caru/carian), calve (cealf/cealfan), chare, char ‘turn’ (cerr, cier/cierian), obs. churl ‘take a husband’ (ceorl/ceorlian), claw (clāwu/clāwian), cloth, clothe (clād/claðian), obs. cheap ‘trade’ (cēap/cēapian), curse (curs/cursian), deal (dēl/dēlan), dye (dēg/đēgian), ebb (ebb/aebbiam), end (ende/endeian), fathom (fæpm/fæmian), fear (fēr/fēран), fan ‘winnow’ (fann/fannian), fish (fisc/fiscian), fire (fīr/fīrian), fold ‘make sheepfolds’ (falod, fald/faldian), fight (fehte, feht, gefeht/fehtan), fowl, orig. ‘catch fowl’ (fugel, fugol/fug(e)lēan), harm (hearm/hearmian), heap (hēap/
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hæopian), heat (hētu, hēto/hēlan), harp (hearpe/hearpian) hasp (hæpsel/hæpsian), handle (handle/handlian), hoard (hord/hordian), hire (hýr/hýrian), helm, orig. ‘cover with a helm’ (helm/helmian), horse (hors/horsian 1100), house (hūs/hūsian), hue ‘form’, later ‘color’ (hīw/hivian), hedge ‘surround with a hedge’ (hægge/hæggeian), inn (inn/innian 1100), knee (cnōw/cnōwian), love (lufu/lufían), lose (los/loss/lośian), list ‘listen’ (líst/lístian), mark (mearc/mearcian), martyr (martyr/martyrian), milk (milc/mocMilcian, milocian), mist (mīst, mistian), monk ‘orig. make a monk of’ (munuc/munecian), man (man/mannian 1122), need (niel/niedan), (name:nama/genamian), nail (naegel, naegl/naglan), obs. path (pæþ/pæþían), pepper (pipor/piporían), pine ‘torment’ (pin 1154/ pinnian 893), plant (plānje/plantian), plight (pliht/plihtian), psalm (sealm/sealmian), rain (regn/regnian), dial. ridder ‘riddle, sift’ (hrider, hrider/hridrian), rest (rest/restian, restan), shame (scæmu/scæmian), salt (salt/sealtian), saddle (sadol/sadolian), sail (seg(e)/seqlian), salve ‘anoint’ (sealm/sealfian), shoe (scoh/sekian), shhp (scip/scipian), shadow (sceado/shedian), sight (sealm/selmeian), soil ‘Orig.’ (snekk/sneckian), smoke (smoca/smocian), smear (sm eru/smierwan), smith (simb/simpiam), sorrow (sorb, sorrg/sorgian), spell ‘talk’ (spel/spelian), speed (spēd, spēd/spēdan), tap (teppa/teppian), tale ‘recon’ (talu/italian), thank (panc/pancian), timber (timber/timbran, timbrian), thieve (þeþ/þefian), threat ‘threaten’ (þræt/þrætnian), thunder (þunor/þunrian), token (tācn, tācn/tācian), tide ‘happen’ (tid/tidan), obs. trendle (trendel ‘circle/atrendlian), ward (woerd/woerdian), water (water/wat(e)rian), weed (wēod/wēodian), whistle (wvistle/wvistilion), will (wilf/willian), wound (wndnwundian), wonder (wundor/wundrian), weid ‘pledge’ etc. (weid/weddian), weapon (weþen/weþpian), wise (wif/wifian) yoke (geoc/geocian).

5.2.2. The following date from the 13th c. (the indications in parentheses refer to the respective sb; when no indication is given, the sb is OE): bill ‘strike with the bill, peck’, blaze ‘burn’, belt ‘gird with a belt’, obs. child ‘give birth’, cripple ‘walk lamely’, den ‘hide in a den’, dust ‘be dusty’, file, flower (1225), friend ‘gain friends for’, fine ‘put a fine on’ (1200), fodder ‘give f.’, fist ‘fight with the fists’, ground ‘bring to the g.’, gleam, hook ‘bend’, head ‘take off the h.’, kern ‘form grains’, knight, leech ‘heal’, loan (1240), lid ‘put lid on’, lord ‘be lord’, land ‘bring to land’ (OE = lendan), lock ‘fasten with a lock’ (OE = lūcan), master, mouse ‘catch mice’, mouth ‘speak’, nest (OE = nistian), pride ‘adorn proudly’, prout ‘put in p.’ (1123), riddle ‘pass corn through a riddle’ (1100), rust, rope ‘fasten’, stone, smithy ‘make into a smithy’ (1300), stream, saw ‘cut with a saw’, son ‘have a son’, shrine ‘enclose relics in a s.’, shroud ‘clothe’, snow (OE sníwan), shrill, truth ‘believe’, whelp ‘bring forth whelp’, word ‘speak’, wheel, wimple ‘veil’ (1100), witness.

5.2.3. Later are recorded (reference in parentheses is to the sb) angle ‘fish’ (OE), back (OE), balm (ME), barrel (ME), brain ‘smash the brains’ (OE), bran (ME), bribe (ME), butter (OE), cap (OE), cart (ME), castle (OE), chapter (ME), coffer (ME), cradle (OE), experiment (ME), farm (ME), fellowship (ME), finger (OE), garner (ME), grass (OE), halter ‘fasten’ (OE), horn (OE), hull ‘remove the hull’ (OE), kitten (ME), lamb (OE), leaven (ME), malt (OE), market (EME), marshal (ME), mire ‘plunge in a m.’ (ME), moss (ME), muzzle (ME), neck ‘strike the neck’ (OE), night (OE), oil (ME), pearl (ME), picture (ME),
piece (ME), pit ‘cart into a pit’ (OE), plank (ME), plate (ME), plow, plough (OE), plague (ME), priest (OE), promise (ME), prose (ME), ridge (OE), rivet (ME), robe (ME), root (EME), sack (OE), sauce ‘season’ (ME), scale (ME), screen (ME), shoulder (OE), shovel (OE), side (OE), silver (OE), sponge (OE), spot (ME), story (ME), streak (OE), summer (OE), table (ME), thong (OE), tin (OE), veil (ME), winter (OE), all before 1500.

5.2.4. angle ‘run into a corner’ (ME), balance (ME), butcher (ME), cipher (ME), cloister (ME), coffin (ME), collar (ME), colt ‘run wild as a colt’ (OE), fancy (1465), fin (OE), gesture (ME), girdle (OE), glove (OE), gossip (OE), grade (1511), husk (ME), kennel (ME), knob (ME), ladle (OE), latch (ME), lawnder (ME), lecture (ME), libel (ME), loaf ‘form a loaf’ (OE), message (ME), mask (1534), mill (OE), moan (ME), mother (OE), neighbor (OE), nickname (1440), nurse (ME), nose (OE), park (ME), patch (ME), pattern (ME), pawn (1496), phrase (1530), pig (ME), pinion (ME), place (ME), pole (ME), police (1530), pulley (ME), puppy (1486), guilt (ME), rafter (OE), riddle ‘speak in riddles’ (OE), roost (OE), sample (ME), scabbard (ME), scar (ME), school (OE), screw (ME), scythe (OE), sheaf (OE), shell (OE), shop (ME), shower (OE), skin (ME), slave (ME), speck (OE), star (OE), stomach ‘be offended’ (ME), style (ME), sun (OE), team (OE), tent (ME), torture (1540), trumpet (ME), umpire (ME), usher (ME), vision (ME), all 16th c.

5.2.5. anvil (OE), bastinado (1577), blanket (ME), burrow (ME), casket (1467), crutch (OE), evidence (ME), flesure (ME), gangrene (1543), gipsy (1537), hand (OE), harbinger (ME), hinge (ME), hint (1604), jewel (ME), kerchief (ME), label (ME), lacquer (1579), lamp (ME), laurel (ME), leaf (OE), leg (OE), manufactur (1567), mast (OE), model (1575), moon (OE), oar (OE), paw (ME), pillory (ME), pilot (1530), pinnacle (ME), pulp (1563), puncture (ME), race ‘run’ (ME), rival (1577), serenade (1649), shaft (ML), skirt (ME), soldier (ME), stilt (ME), strand (OE), supper (ME), tail (ME), tincture (ME), tub (ME), all 17th c.

5.2.6. badger (1523), bayonet (1692), buckram (ME), capture (1541), chaperon (ME), chum (1684), diamond (ME), dinner (ME), flannel (1503), guarantee (1679), knuckle (ME), lantern (ME), mob (1688), nerve (ME), onion (ME), partition (ME), pioneer (1528), putty (1633), queue (1592), raft (ME), shepherd (OE), stocking (1553), strap (1573), tour (ME), all 18th c.

kerb (1664), kite (OE), knife (ME), loot (1839), monkey (1530), placard (1481), portage (ME), room (OE), schedule (ME), scrimmage (1470), segment (1570), shin (OE), signal (ME), skunk (1634), tablet (ME), torpedo (1520), truck (1611), trustee (1647), vacation (ME), wolf ‘eat like a wolf’ (OE), 19th c., major 1927.

It would be difficult to give a complete list of derivatives as there is an ever growing tendency to derive verbs from sbs without derivative morphemes. A few recent verbs are service, contact (1929), audition, debut, package, chairman, page, date (1928), process (1945), waitress (1946, see ASp 21 (1946) 304), pressure (not in OED or Spl.), feature (rec., as in the play features). Mencken (AL4, 195 and Spl. I. 382ff.) gives many more, most of which are, however, hardly used.
5.2.7. It is likewise useless to try a classification according to sense-groups, as there is no class-denoting formative. The vb may denote almost any verbal action connected with the basis of the underlying sb. The vb *bed* has or has had the meanings ‘spread a bed’ (obs.), ‘put to bed’ (with various implications), ‘go to bed’, ‘lodge’ (obs.), ‘sleep with’, and there are more technical meanings. Bladin had already pointed out that “every action or occurrence can be designated by a verb derived from the very noun the idea of which most easily enters the mind of the person wanting to state a fact” (57), and if Jespersen says that “it is difficult to give a general definition of the sense-relation between substantives and de-substantival verbs” (VI.6.71), this is rather an understatement. We may recognize certain groups, as ‘put in . . .’, ‘furnish, cover, affect with . . .’, but it should be noted that each of these senses is only one of the many which the same verb has or may have. Biese, therefore, makes no attempt at classification, and he is certainly right in doing so. It may, however, be worthy of note that the privative sense as in *dust* ‘remove the dust (from)’ is frequent only with technical terms denoting various kinds of dressing or cleaning. Exs are *bur wool* or *cotton, burl cloth, bark, rind, poll, pollard trees, bone, fin, gill, gut, scale fish, flesh hide, stone fruit, worm plants, skin animals, shell, husk, hull corn, shucked nuts, corn (AE), weed a garden*. For more exs see Bladin 160—162.

The meaning of a certain vb is clear in a certain speech situation. That *brain* means ‘smash the b.’, *colt* ‘run wild as a colt’, *halter* ‘fasten with a h.’, *harp* ‘play the h.’, *leaf* ‘develop leaves’, *mire* ‘plunge in a mire’, *mob* ‘attack, crowd’, *mouse* ‘catch mice’, *pulley* ‘raise with a pulley’, *raft* ‘transport by raft’, *stilt* ‘walk on stilts’, *stomach* ‘be offended’, *strand* ‘drive ashore’, *sun* ‘expose to the sun’, *can* ‘preserve in cans’, *winter* ‘pass the winter’, *vacation* ‘make a vacation’, *audition* ‘grant an audition’ etc. is a result of given circumstances which establish the bridge of understanding between the speaker and the person or persons spoken to.

5.2.8. There are derivatives from proper names, as *boycott* 1880 (orig. spelt with a capital, from the name of Captain Boycott who was first boycotted), *Shanghay* 1871 ‘drug and press on board a vessel’, *Zeppelin* 1916 ‘bomb from a zeppelin’ (also clipped = *zep*), and the obsolete verbs *Copenhagen* 1810 DA, *Burgoyne* 1777 DA, *Cornwallis* 1799 DA.

5.2.9. Some verbs often occur in the -ing sb only (originally or chiefly), while finite verb forms or infinitives are not or rarely used, as *hornpiping* ‘dancing a hornpipe’ (no vb rec.), *slimming, slumming, orcharding* ‘cultivation of fruit trees’ (no vb rec.), *moonlighting* ‘illicit action by night’, *blackberrying* ‘the gathering of blackberries’ (no vb rec.), *ducking* ‘the shooting of ducks’ (the vb has quite different meanings). *Dialling* ‘the art of constructing dials’, *speeching, auctioneering, buccaneering, electioneering, engineering, parliament- eering, privateeering, volunteering* are the original forms. Converted cpds with -monger for a second-word are current only in the -ing form (merit-mongering, money-mongering etc.). *Innings* is not matched by any other vb form, nor are *cocking* ‘cock-fighting’, *hopping* ‘hop-picking’, *sniping* ‘snipe-shooting’, *moon- shining* ‘illicit distilling’ AE and others.

For another aspect of direct -ing derivation from sbs, see sf -ing.
5.3. Type idle vb fr. idle adj (deadjectival verbs)

To the OE period go back bare, bitter, busy, cool, dizzy, dry, dusk, even, fair, fat, foul, glad arch., green, idle (in modern use rec. since 1592), light, narrow, open, right, stark 'become stiff', still, thin, white, yellow (obs. blake, bright, dead, dreary, strong, old, short, good, great).

From the period between about 1150 and 1200 are recorded obs. sick 'suffer illness', soft, low (obs. meek, hory, hole).

The following date from the period between about 1200 and 1300 (Biese has included the Cursor Mundi in this period): black, lame, brown, loose, slight, thwart, better, dim, blind (obs. hardy, certain, rich, wide, broad, dumb, less).

From the 14th c. are recorded tame, treble, ready, clear, fine, smooth, sour, crisp, grey, sore, pale, faint, full, dull, round, sober, humble, gentle, English, supple, tender, perfect, blunt, calm (obs. able, hasty, sound, weak, unable, honest, noble, bawdy).

From the 15th c. we have purple, scant, stale, clean, hollow, perplex, from the 16th c. obscure, shallow, frisk, slack, slow, quiet, empty, bloody, plump 'make plump', lavish, fit, mellow, nimble, equal, dirty, idle, russet, secure, spruce, parallel (and many other now obs. words, see Biese 130—149).

The 17th c. coined crimson, muddy, numb, giddy, worst, blue, lower, gallant, brisk, shy, concave, virulent, tense, ridicule, unfit, ruddy (and many now obs. words, see Biese 149—163).

From the 18th c. are recorded net 'gain as a net sum' 1758, total (once 1716, then 1859), negative, grizzle, northerm (said of landscape), invalid 'enter on the sick-list', sombre, queer 'cheat' sl, picturesque, from the 19th c. desperate 'drive desperate', convex, stubborn, tidy, sly 'move in a stealthy manner', callous, chirk 'make cheerful' (AE), gross 'make a gross profit' 1884, commonplace, western 'decline in the west (said of the sun)', guttural 'utter in g. tones', tenfold, best, southern (said of the wind), opaque, proof, dense, aeriform, true.

From our century there are such words as pretty, wise, lethal, big (vg, E. Caldwell).

Usually, deadjectival vbs denote change of state, and the meaning is either 'become . . .' or 'make . . .'. Intransitive vbs with meaning 'be . . .' (as idle, sly, equal) form quite a small group. Some vbs have a comparative or a superlative as root: better, best, worst, perhaps lower. See also sf -en.

5.4.1. Type out vb fr. out pt (verbs derived from locative particles)

Derivation from locative particles is less common than the preceding types (in German, such derivation is more common, though chiefly in prefixal obs: begegnen, entgegnen, erwidern, anwidern, äußern, veräußern, erinnern etc.). In OE there are uppán, fremman (with i-mutation from úp, fram), framian, forðian, útian. Later are over 'to master' 1456, obs. under 'cast down' 1502, off 'put off' 1642, down 1778, nigh 'draw near' 1200, thwart 1250, west 'move towards the west' 1381, south 1725, north 1866, east 1858.

These words, however, are not very common (except out and thwart).
5. 4. 2. Type **hail** vb fr. **hail** int (verbs derived from minor particles)

Derivation from exclamations and interjections (most of them onomatopoecias) is more frequent. It will, however, be noted that many of these conversions have undergone functional and formal changes only without acquiring a well-grounded lexical existence, their meaning merely being 'say . . . , utter the sound . . . '. Exs are **hail** 1200, nay 'say nay, refuse' 13., mmm 1399, hem 1470, obs. **hust**, **hosht** 'reduce to silence' etc., tush, yea, soho, whoo (16th c.), shoo, pooh, humph (17th c.), encore, gee-hup (to a horse), pehaw, hoicks, yoho, hal-loa, yaw 'speak affectedly', hurray (18th c.), tally-ho (fox-hunting term), boo, yes, heigh-ho 'sigh', bravo, tut, bow-wow, haw-haw, boo-hoo 'weep noisily' etc. (see Biese 178—214, also Jesp. VI. 6. 92/93).

The meaning 'say . . .' may occur with other words also when they are used as exclamations or interjections, as with **issing** (other verb forms are not recorded), hence 'order hence' (obs., 1580). And we may reckon here all the words of the type **sir** 'call sir'.

From about 1600 on, geminated forms also occur as verbs. A few have been mentioned in the foregoing paragraph; others are snip-snap (1593), dingle-dangle, ding-dong, pit-pat (17th c.), pitter-patter, tick-tick, hurry-scurry, shilly-shally, dilly-dally, wiggle-waggle (18th c.), criss-cross, rap-tap, wig-wag (19th c.) etc.

The limits of verbal derivation

5. 5. Derivation from suffixed nouns is uncommon. Biese's treatment of the subject suffers from a lack of discrimination. He has about 600 examples of substantives and adjectives; but the 'suffixes' are mere terminations. Words such as herring, pudding, nothing, worship are not derivatives. The terminations -ace, -ice, -ogue, -y (as in enemy) have never had any derivative force.

Theoretically it would seem that the case of a suffixal composite such as **boyhood** is not different from that of a full compound such as **spotlight**. But obviously the fact that suffixes are categorizers generally prevents suffixal derivatives from becoming the determinants of pseudo-compound verbs. There are very few that are in common use, such as **waitress** (rec.), **package** (rec., chiefly in form packaged, packaging), **manifold** OE (obsolescent today), **forward** 1596, **referee** 1889, such adjs as dirty, muddy. Many more are recorded in OED (as **countess**, **patroness**, **squires**, **traitress** 'play the . . . ', **fellowship**, kingdom a.o.).

Another reason seems to be still more important. Many of the nominal suffixes derive sbs fr verbs, and it would be contrary to reason to form such verbs as **arrival**, **guidance**, **improvement**, **organization** when **arrive**, **guide**, **improve**, **organize** exist. Similar considerations apply to deadjectival derivatives like **freedom** or **idleness**. The verb **disruption** is recorded in OED (though only in participial forms) but it is not common. **Reverence** is used as a verb, but it is much older (13., sb 1290) than the verb **rever** (1661). It should also be noted that the alternation **rever**/**reverence** shows characteristics of vowel change and stress which are irregular with derivation by means of **-ance**, **-ence**. For the same reason **reference** is not a regular derivative from **refe**, which facilitated the coinage **reference** 'provide with references' etc. 1884.

There are no verbal derivatives from prefixed words either. The verb **unfit** 'make unfit' 1611 is isolated.
5. 6. 1. Type look sb fr. look vb (deverbal sbs)

Deverbal sbs are much less numerous than denominal verbs. The frequency-
relation between the two types has been approximately the same in all periods
of the language. An exception is to be made for the second half of the 13th c.
"when the absolute number of conversion-substantives is larger than that of
the verbs formed from substantives" (Biese, p. 34).

From the 13th c. are recorded (unless otherwise mentioned in parentheses,
the resp. verbs are OE) dread (ondrēdan 1175), grind, have, look, smile, steal,
weep, ail, stink; crow (before the cock's crow), break, call (1225), crack 'noise',
dwell, groan, heed, hide, make, mislike, mourn, quake, rot, shift, shave, show, slake
'act of slacking', spit 'spittle', stink, wax, wrest 'act of twisting' a.o.

5. 6. 2. From the later ME period are recorded (indications in parentheses
refer to the respective verbs) ail (OE), aim (ME), fall (OE), feel (OE), frame
(OE), hit (ME), hunt (OE), keep (OE), knock (OE), lift (ME), move (ME), nap
(OE), pinch (ME), pluck (ME), put (ME), run (OE), shoot (OE), sink (OE),
natech (ME), sob (ME), treat (ME), walk (OE), wash (OE).

From the 16th c. date beat (OE), blemish (ME), craze (ME), crinkle (ME), croak
(ME), glide (OE), gloom (ME), grasp (ME), grope (OE), hiss (ME), knit (OE),
lauuch (ME), purge (ME), push (ME), rave (ME), say (OE), scowl (ME), scratch
(ME), scream (ME), shine (OE), simper (1563), slur 1598 (1594), snub (ME),
soak (OE), split 1597 (1590), stretch (OE), stumble (ME), swim (OE), wave
(OE); from the 17th c. contest (1579), converse (ME), grin (OE), grumble (1586),
hitch (1440), laugh (OE), produce (1499), quote (ME), scud (1532), shear (OE),
shudder (ME), shuffle (1532), sip (ME), sneeze (1493), snort (ME), stroke (OE),
struggle (ME), take (ME), yawn (OE); from the 18th c. bid (OE), finish (ME),
growl (ME), hang (OE), prance (ME), prod (1535), pry (ME), ride (OE), rip
(1477), saunter (1475), scan (ME), sit (OE), whimper (1513). From the 19th c.
we have 1891 assist (1514), fix (ME), quote (1387), meet (OE), melt (OE), mince
'minced meat' (ME), muddle (1596), shampoo (1762), shimmer (OE), shunt
(ME), spill (OE), spin (OE), tickle (ME).

5. 6. 3. As for the meaning of deverbal sb, the majority denote the act or
rather a specific instance of what the verbal idea expresses (assist, beat,
blemish, quote, contest, fall, fix, growl, hiss, hunt, knock, lift, nap etc. etc.;
the term 'action-noun' which Hertrampf and Biese use is therefore not good).
This has been so from the beginning (see Hertrampf and Biese). "The abstract
nouns, including nouns of action, are not only the most common type of
conversion-substantives; they are also those of the greatest importance
during the early periods of the development of conversions" (Biese 308). "The
conversion-substantives used in a personal or concrete sense are, especially
in the earlier stages, of comparatively slight importance" (ib.).

Concrete senses show mince 'minced meat', produce 'product', rattle 'in-
strument', sprout 'branch', shoot 'branch', shear 'shorn animal', sink 'sewer',
clip 'instrument', cut 'passage, opening', spit 'spittle', stride 'one of a flight of
steps'.

Sbs denoting the result of the verbal action are catch, take, fang, win 'victory',
cut 'provision', find, pinch (of snuff), melt 'melted substances', slur 'slurred

Place-denoting are fold, bend, slip, wash ‘sandbank’, dump etc.

5.6.4. Sbs denoting the impersonal agent are draw ‘attraction’, hitch ‘fastener’, catch (of a gate, a catching question etc.), stick ‘something that causes delay’, sting ‘animal organ’, tread ‘part of the sole that touches the ground’, sell, do, hoax, take-in, all ‘tricky contrivance’, wipe ‘handkerchief’ sl etc.

There are also a number of sbs denoting a person. OE knew the type boda ‘bode’ (corresponding to L scriba, OHG sprecho) which in ME was replaced by the type hunter (for a parallel development in German since the MHG period see Wi 151). Several words survived, however, as bode, help (OE help), hunt (the last quotation in OED is from 1807), and we have occasional ME formations, as ally 1380 (if it is not rather French allié); spy 1250 is OF espie, but could be apprehended as formed after the type. Obs. cut (a term of abuse) 1490 does not seem to have any connection with the vb cut, and scold ‘scolding woman’ 1200 is doubtful, the vb is first quoted 1377.

The word wright, which now occurs only as a second-word of cpds (cartwright etc.) is no longer apprehended as an agent noun (belonging to work). Otherwise all deverbal sbs denoting a personal agent are of Modern English origin, 16th c. or more recent. The type probably came into existence under the influence of the types pickpocket and runabout. Exs are cheat 1532, sneak 1643, obs. stroll ‘stroller’ 1623, tramp 1664, romp ‘child or woman fond of romping’ 1706, flirt 1732, crack ‘cracksman’ 1749 (thieves’ sl), soak ‘drunkard, tippler’ 1820 H, bore ‘triesome p.’ 1812, sweep ‘chimney sweater’ 1812, pry ‘prying person’ 1845, tease 1852, trot ‘toddling child’ 1854, have and have-not 1836, beat ‘unprincipled sponger’ 1877, gouge ‘imposter’ A sl 1877, coach ‘tutor, trainer’ 1848 (misleadingly classed in OED, as if from sb coach), flunk ‘student who flunks a class’, squirt ‘top’ etc., discard ‘discarded person’. The great number of deprecative terms is striking.

For the sake of convenience I repeat here the examples of such personal deverbal sbs as form the second-words of cpds: upstart 1555, by-blow 1595 = obs. by-slip 1670 ‘bastard’, chimney-sweep 1614, money-grub 1768, shoeblack and bootblack 1778, new-come ‘new arrival’ 1577, bellhop, carhop rec.

5.6.5. The formation of deverbal sbs may be considered from the angle of syntactical grouping. No doubt there are different frequency-rates for a word according to the position which it has in a sentence. Biese has devoted a chapter (XIII, pp. 282—302) to the question and has established various types of grouping which have influenced the growth of the type. We see that deverbal sbs frequently occur in prepositional groups (to be in the know), that they are often the object of give, make, have, take (less so of other verbs), that only 11% of the exs show the deverbal sbs as subject of the sentence and that they are frequently preceded by adjuncts. The most important patterns are ‘(be) in the know’ and ‘(have) a look’. Exs of the first type are phrases such as in a daze, in the long run, on the wane, on the wax, upon the go, with a jerk, with a thrust of his hair, after this sit, after this slovenly win, for a tell, for the kill, for the draw, of English make, at one sting, at a gulp, get into a scrape etc. (see Biese 294—298 for early instances and a statistical survey).
5.6.6. As for the t. ‘(have) a look’, “the use of phrasal verbs with conversion-substantives may be said to be a very marked feature during all periods from early ME up to the present time. As shown by our quotations, the origins of this use may be said to go back as far as the OE period” (Biese 301). Exs are: have a wash, a smoke, a swim, a chat etc., give a laugh, a cry, a break, a toss, a whistle, the slip, the chuck, the go-by etc., take a ride, a walk, a swim, a read, the lead etc., make a move, a dive, a bolt, a bow etc. etc.

5.6.7. It will be interesting to compare zero-derivatives with the -ing sbs. Historically speaking there is no longer a competition so far as the formation of common sbs is concerned. The number of new-formed -ing sbs has been steadily decreasing since the beginning of the MoE period. According to Biese the figures for newly introduced -ing sbs, as compared with zero-derivatives of the same verbs, are as follows: 13th c. = 62, 14th c. = 80, 15th c. = 19, 16th c. = 12, 17th c. = 5, 18th c. = 2, 19th c. = 0. Biese has obviously considered the rise of new forms only, but not the semantic development of -ing sbs. Otherwise his figures would have been different (see -ing sf). Any verb may derive an -ing sb which can take the definite article. The -ing then invariably denotes the action of the verb: the smoking of the gentlemen disturbed me. The zero-derivative, as compared with the -ing, never denotes the action but gives the verbal idea in a nominalized form, i.e. the notional content of the verbal idea (with the secondary implication of the idea ‘act’): the gentlemen withdrew for a smoke. “In their use with phrasal verbs -ing forms have become obsolete, whereas there is an ever increasing number of conversion substantives used in conjunction with verbs like make, take etc. . . .” (Biese 310). On the other hand, common sbs in -ing are now chiefly denominal, denoting something concrete, chiefly material (see -ing sf), which eliminates -ing as a rival for zero-derivatives. According to Biese (312) this distinction is already visible in the early stages of conversion. Biese points out that a prepositional cb following a sb is almost always a ‘genitivus subjectivus’ (the grind of wheels), whereas the same type of group following an -ing sb is most often a ‘genitivus objectivus’ (the arizing of bodye, 314/315) which is certainly an observation to the point, as it shows the verbal character of the -ing sbs as compared with the more nominal character of zero-derivatives.

A few instances of semantically differentiated derivatives are bother/bothering, breed/breeding, build/building, proceeds/proceedings, meet/meeting, set/setting, turn/turning, bend/bending, find/finding, sit/sitting, clip/cliping, cut/cutting, feel/feeling, paint/painting.

5.6.8. Sometimes deverbal substantives are only idiomatic in the plural: it gives me the creeps (the jumps), turn on the weeps A sl, have the prowls A sl, the bends ‘caisson disease’, for keeps ‘for good’.

5.6.9. For reasons similar to those discussed in 5.5. there are no nominal derivatives from suffixed verbs. An apparent exception are derivatives from expressive verbs in -er (type clatter) and -le (type sparge) which are pretty numerous (see Biese 266–267), but in fact most of these verbs are not derivatives in the way verbs in -ize or -ify are, because few simple verbs exist alongside of the composites (see 4.29 and 4.59). These words are better described as composites of expressive elements, so the suffixes are not categorizers.

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5. 6. 10. Derivation from prefixed verbs is restricted to composites with the prefixes dis-, mis-, inter-, and re- (see the respective prefixes). With other prefixes, there have only been attempts at nominal derivation. Biese has befall, beget, behave, belay, belove, beseech, bespeak, bestow, betide, betrust as substantives. But they were all short-lived and rare. With the exception of belay 1908, a technical term, none seems to be in use today.

Biese has established a so-called detain- type, i.e. substantives derived from what he considers to be prefixed verbs. I do not see the point of this distinction as one could analyse very few of his 450 words or so. The majority are unit words.

Zero-derivation and stress

5. 7. 1. I shall now make a few remarks about such types as have not been treated in this chapter. The stressing tendencies differ according to whether the basis is a unit word or a composite, also according to whether derivation is made from a noun or a verb.

Nominal derivation from composite verbs involves shift of stress. Exs are the types runaway / blackout, overthrow, interchange, misfit, reprint which are derived from actual or possible verbal composites with the stress pattern \( \ddash \). The process has not yet come to an end which will explain that the OED, Webster and others very often give stress indications which no longer tally with the speech habits of the majority. Many obs of the blackout type and all the sbs of the types misfit and reprint are stressed like the verbs resp. verbal phrases in OED.

Of prefixal types only vbs with inter-, mis- and re- have developed stress-distinguished sbs. No similar pairs exist for neg. un- (no verbal type exists, anyway), reversative un-, dis-, be-, de- (be- and de- are only deverbal).

5. 7. 2. Verbs derived from composite sbs do not change their stress pattern, see 2. 38. 7. Cp. such verbs as backwash, background, afterdate, by-pass, counter-weight, outlaw, outline, underbrush which are forestressed like their underlying nominal bases. This also explains the fluctuation in the stressing of counter- vbs, as counter-sign, counter-sink, stressed like the sbs though the verbal stress pattern is middle stress/heavy stress.

5. 7. 3. With unit words the current tendency is to retain the stress of the underlying in deverbal nouns as well as in denominal verbs. We may call this homologic stressing. Bladin (58) had stated the fact for denominal verbs without, however, discussing the problem as to the obvious exceptions, while Jespersen (VI. 1. 4) speaks of 'such an important thing in word-formation as the stress-shifting in record sb and vb'.

5. 7. 4. To a certain extent, we have a stress distinction between nouns and verbs which are otherwise homophonous. This distinctive stress pattern occurs chiefly with disyllabic words, record sb / recórd vb. Exs are absent, abstract, contract, extract, accent, affix, infix, prefix, suffix, augment, compound, compress, impress, concert, concrete, conduct, confine, conflict, conscript, consort, contest, contrast, convert, invert, pervert, convict, digest, discord, escort, essay,
export, import, transport, ferment, frequent, impact, increase, ingrain, insult, object, subject, project, traject, perfume, permit, presage, present, produce, progress, regress, protest, rebel, recess, retail (in BE, in AE it has forestressed always), survey, torment, transfer.

5.7.5. The number of non-shifting exs is much greater, however. I will first give instances of forestressed words with homologic stress: comment, compact, exile, figure, plaster, preface, prelude, prison, quarrel, climax, focus, herald, process, program, triumph, waitess, rivet, segment, sojourn, turmoil, contact 'bring or come into contact', congress 'meet in a congress', incense 'burn incense', probate. To these may be added from the group in 5.7.4 such verbs as are felt to be derived from a sb and therefore forestessed like the underlying bases, at least in AE: accent, conflict, concrete (as in concrete a wall, also in OED), contract (as in contract a document), digest (as digest a book), export, import (prob. originating in contrastive stressing), recess (as recess a wall), survey (in certain senses), torment (frequent), transfer (the regular stressing as a railway term).

5.7.6. The group of non-shifting endstressed words is considerably larger. Unit words beginning with de-, dis-, re- are especially numerous. Exs are:

accord, accost, account, afront, advance, amount, approach, assent, attack, attempt, attire, avail, cement, concern, decay, decrease, delay, defeat, disgrace, dismay, dispatch, display, dispute, distress, escape, exclaim, embrace, exhaust, patrol, present (as a deverbal sb 'presenting position of a rifle'), precise, preserve, reflect, refresh, regard, relax, release, remove, repair, repay, repeal, repeat, reply, reprieve, repute, require, resolve, respect, revenge, review, reform, support and many others (see the list of deverbal sbs Biese 454ff.).

5.7.7. On the other hand, we find instances of distinctive stressing in AE: address, conserves, discard, discharge are often heard with forestress when sbs, also relay and research; reject sb with forestress is the only pronunciation possible. Of these, relay and research may be explained as reinterpretations after the t. réprint sb/réprint vb; reject is perh. influenced by subject, object, project, traject. In any case, this tendency towards distinctive stress in deverbal sbs is weak as compared with that towards homologic stress.

5.7.8. To sum up: the PE tendency with denominal vbs is to give them the stress of the underlying nominal basis, which has in many cases led to homologic stress with all or part of the verbal meanings versus older distinctive stress. Deverbal sbs, on the whole, show the same inclination to homologic stress. But there is also a weak tendency towards distinctive stress, though chiefly in AE. As for the tendency toward stress distinction between nominal and verbal homophones pointed out by Jespersen, it was perhaps vaguely on the analogy of composites that it came into existence. The original stress with these loans from French or Latin was on the last syllable (F absént, L abstráct(um)), so verbs retained this stress all the more easily as many native vbs were so stressed: become, behold, believe, forbid, forget, forgive, mislead etc., whereas almost all disyllabic native sbs, unit words as well as composites were forestressed (the few contrary exs such as unhealth, unrest, untruth, belief
hardly count against the overwhelming majority). This may have led to a
tendency towards forestress with non-native disyllabic sbs, too. But what
has taken on the character of a strong derivative device with composites has
proved much weaker with unit words on account of their entirely different
structure. Further development seems to point in the direction of homologic
stressing.

5. 7. 9. Cbs of the type *hanger-on* may be mentioned here. As they are func-
tionally characterized by the sf -er, the absence of stress shift is only natural.
The stress pattern of the underlying verbal phrase is retained.

5. 7. 10. The stress shifting discussed in 3. 4. 4 involves the phonological
alternations of vowel dealt with 4. 1. 28.
VI. BACKDERIVATION¹

6.1. Type peddle vb fr. peddler sb

If we take a word such as writ-er, we connect it with the verb write. The existence of a composite writ-er entitles us to the conclusion, so to speak, that the basis write exists, too. Now, if writer is correlated to write, then peddler must have a correlatum peddle, too. Historically speaking, peddle vb is derived from peddler sb. This derivative process is usually called backformation. We prefer the term backderivation to stress its derivative character.

The pseudo-agent substantives which have given rise to backderived verbs, are of various, partly unknown origin, a point that is not relevant to word-formation. Examples are beg 1225/beggar 1225, peddle 1532/ peddler 1377, hawk 1546/hawker 1510, stoke 1683/stoker 1660, scavenge 1644/scavenger 1530, swindle 1782/swindler 1775, edit 1791/editor 1712, subedit 1862/subeditor 1837, burgle 1870/burglar 1541.

Other verbs so formed occur in dictionaries, but are hardly used, or are not felt to be ‘derivatives’, as broke/broker, carpent/carpenter, butch/butcher, sculpt/sculptor, buttle/butler, ush/usher, stenograph/ stenographer. Mencken (AL⁴, Spl. I. 396—397) quotes such verbs as chiropract, auth (fr. author), mart (fr. martyr), chauffe (fr. chauffeur) which, however, have no currency.

6.2. Type televise vb fr. television sb

The analogy of pairs like act/action, react/reaction, exempt/exemption, correct/correction, inject/injection, elect/election, execute/execution, revise/revision and others could not fail to create the feeling of derivational connection between the verbs and their respective deverbal substantives. The result has been the tendency to supply the verb when the substantive existed. Exs are infringe ‘infringe’ 1798 AE, resurrect 1772, preempt 1857 AE, vivisect 1864, electrocute 1889, telewise 1927. Mencken (AL⁴ Spl. I. 396) quotes such verbs as elocute, emote, resolute, combust. The frequent alternation -ate vb/-ation sb (as in alternate/alternation) has obviously helped to derive verbs from substantives in -ation. Modern Americanisms such as donate 1845 and orate c 1860 are due to this correlative derivation. Many earlier verbs in -ate probably arose under similar circumstances (see 4. 17. 5).

The semantic correlation is accompanied by certain phonological changes which tend to make the patterns into derivative alternations. It is not enough

VI. Backderivation

to say of a verb that it is a ‘back-formation from the sb.’, a practice OED usually follows. There is no suffix -ion to derive substantives from English verbs, which is the reason why such a backderivation as reuse 1929 fr. reunion is isolated in pattern—a matter of importance for the general adoption of such a verb. It is the pattern of revise/revision, supervise/supervision where the concept ‘see, look’ is present (as against that of provide/provision where it is absent) that was followed to derive televise from television. But it is probably the pattern of resolve/resolution, solve/solution, evolve/evolution, revolve/revolution that has prevented the currency of resolve 1860 and evolute 1884 DA.

6.3 There are other correlative pairs which are isolated. Laze 1592 is formed from lazy, excurse 1748 from excursion, injunct 1871 AE from injunction, reminisce 1829 from reminiscence, quiesce from quiescence, reluct from reluctance. Enthuse 1859 AE (from enthusiasm) has gained considerable currency. Other derivative attempts are the verbs dizz 1632 (fr. dizzy), salve 1706 (fr. salvage), jell ‘congeal’ 1830 AE (fr. jelly), propagand 1901 (fr. propaganda), pheeve 1913 (fr. peevish). Cf. also the jocular formations Hump-ty Dumpty makes in Lewis Carrol’s ‘Through the Looking-glass’: gyre ‘to go round and round like a gyroscope’ and gimble ‘to make holes like a gimblet’.

6.4. Backderivation offers linguistically interesting problems. Synchronically speaking, not all backderivations have the same status. We distinguish two groups: 1) burgle vb fr. burglar sb, 2) swindler sb fr. swindle vb. While a swindler is ‘one who swindles’, surely a burglar is not ‘one who burgles’. In terms of synchronic analysis this means that swindler is no longer felt to be a pseudo-agent substantive but is considered a genuine derivative from swindle vb. With regard to the pair burglar/burgle, however, the relationship is different. Here the deriving basis is burglar while bulge is the derivative. The verb burgle is zero derived from burglar, analyzable as ‘be, act as a burglar’. It is parallel to the verb father derived from the substantive father, the only difference being the pseudo-morpheme /o(r)/ which is clipped from burglar. Originally, all backderived verbs belong to this type and most present derivatives must still be analyzed as zero-derivatives from their ‘suffixal’ basis. The verb televise is naturally analyzable as ‘put on television’. The type swindler sb fr. swindle vb therefore represents an advanced stage of semantic development that many correlative pairs will perhaps never attain. Pseudo-compound verbs of the type stagemanage from stagemanager, for instance, are all derivatives of the semantic type burgle fr. burglar. The use of such verbs is still widely restricted with regard to their acceptance by speakers as well as with regard to their use in all verb forms alike. While the derivative correlation of agent sb in -er and verb is absolute (any verb can derive an agent substantive as a grammatical form), that of composite agent substantives in -er and pseudo-composite verbs derived from them is not: we are far from being at liberty to derive such verbs, and a great number of speakers are still reluctant to use them, at least in all verb forms. Historical knowledge of the problem here
greatly helps us to understand the present-day linguistic situation and explains the limited functional yield of both the type *stagemanage* fr. *stagemanager* and the type *burgle* fr. *burglar*. On the other hand, we cannot grant derivative status to alternations (such as *enthuse*/enthusiasm) unless they are represented by at least several derivationally connected pairs of words. We have included them to show the possible patterns that may develop in speech. With regard to their linguistic value, however, we have to state that non-typical alternations are not relevant to word-formation which is essentially a system of functional, i.e. type-forming patterns.
VII. PHONETIC SYMBOLISM

7. 1. The principle of sound symbolism is based on man’s imitative instinct which leads us to use characteristic speech sounds for name-giving. We may imitate things which we perceive through our senses (Direct Imitation). We may also use speech sounds to express feelings (Expressive Symbolism). We cannot tell which is primary as the wish to give vent to our feelings seems as natural as our desire to render adequately what we perceive with our senses. We will call these expressive morphemes symbols.

7. 2. As for direct imitation, we imitate by speech sounds what we hear, i.e. noises, sounds. As, however, noises and sounds are often accompanied by movements (as in whish, swish, dash, tap etc.), these also come to be denoted by symbols. By extension, even the originator of a sound may be characterized by the use of a symbol (e.g. pom-pom ‘kind of machine-gun’). Strictly speaking, there is direct imitation of sounds only when we render our own vocal sounds or those of others. The sound then stands either for the position the mouth assumes or for the sound produced in the respective position. In bawl, the b renders the softened explosive opening of the lips, while in baa ‘bleat’ the b renders the opening of the sheep’s mouth. The initial p of peep imitates the movement little birds make when opening their beaks for a cry. Lull-words are all renderings of the position of the mouth: ba ba, ma ma etc.; initial m forms almost exclusively words of this kind.

7. 3. With regard to expressive symbolism we note that sounds are often emotionally expressive: /t/ is suggestive of the subjectively, emotionally small and therefore frequent with diminuitive and pet suffixes (-ling, -let, OE -iel, G -lein, L -icelum, -iculum). Initial /f/, /p/, less so /b/, often express scorn, contempt, disapproval, disgust: pish, pooh, ph, fe, foh, faugh (ep. the exclamation fiddleticks, I don’t care a fig, contemptuous words such as fiddle-faddle, fingle-fangle, G p, pah, puh, F fl, L fu). Only certain sounds lend themselves to being used as emotionally expressive symbols. The sounds [k], [g], [d] for instance, are not used at all, [t] rarely.

Initial symbols and word families

7. 4. In the word list below we can see how word families are characterized by certain initial symbols: /sw/ is characteristic of a group denoting swinging movement, /kr/ begins many words expressive of unpleasant noises, and so

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forth. Some of the symbols are originally imitative symbols whereas others have developed as the result of word blending. While /kr/ is found in many languages with words denoting harsh or unpleasant noises because of its suggestive character, the sound [sw] in itself contains nothing suggestive of the concept 'swinging movement', but is obviously a secondary result, more or less incidental, of several words, as sweep, swing, both OE, and OE swengan beginning with this sound. With words denoting sound, the imitative principle has probably a great share in the development of initial symbols, as with /b/ and /p/ which demonstrate an explosion of breath by the sudden parting of the lips and therefore seem to be the most natural rendering of what the ear perceives as an explosion outside. We imitate, in instinctive parallelism, an explosion of sound in the outside world by a movement of our speech organs producing a similar result. The symbols /t/ and /d/ are frequent with words denoting striking or knocking against something. They may be imitative after the movement of the tongue: the tip of the tongue strikes against the teeth or alveoles and is withdrawn with an explosion. Initial /g/ is almost only used with words denoting noises coming from or connected with the throat.

7.5. To what extent sound symbolism is creative in the names of concrete, non-acoustic things is difficult to tell. Certain sound combinations, as k. p, k. b, t. p for protuberant forms (hill, knob, boss, wart, pimple etc.), as in knab, knob, top, tip, testify to the tendency. We can hardly tell what the symbolism of these sounds is due to, but we cannot possibly deny the phenomenon. We shall, however, not treat the subject here, first because the problem is rather one of general linguistics, secondly because of the impossibility so far of finding out what the symbolism is based upon. The reader is referred to the book by H. Hilmer.

7.6. Many words have in the course of time developed sound-symbolic character. In w we can only be concerned with such symbolism as has been at work in the coinage of a word, so secondary sound-symbolism is excluded here.

7.7. Jespersen (La 20. 6) points out "a natural association between high tones and light, and inversely between low tones and darkness". Despite E dark, G dunkel, L obscurus and a few other examples which Jespersen gives I am skeptical as to the validity of the principle. What about night (formerly pronounced with [l]), Gr nyx 'night', L lux, lumen 'light'? And if Jespersen refers to gleam, glimmer, glitter against gloom, it must be said that i does not denote the light but the smallness of it. That i is expressive of smallness (seen emotionally) is not denied here.

7.8. We will now look at the various symbols, beginning with final consonantal sounds:

/p/, /t/, /k/, at the end of a monosyllabic word and preceded by a short vowel are expressive of quick, abrupt, short-stopping or explosive noises resp. rapid, short or short-stopping movements. From OE are recorded knock, pick (through vs piecing 'puncturing'), crack, hit, tuck. ME are clack, flick, hack, kick, peck, smack, snack, rap, tap, whoop, pop, slip, tap, chip, flap, chip, nip, pat, hit, flit. More recent are tick 1440, snap 1495, quiip 1532, click 1581, quack 1617, slap 1632, whoack 1719, plop 1833, plap 1846.
7.9. /b/, /d/, /g/, phonetically the voiced counterparts of the preceding group, are semantically also variants of the preceding symbols. The sharpness of the noise resp. the impact is dulled, blunted, softened, and the movement is either slowed down or drawn out. These voiced variants are less frequent than the voiceless plosives. From OE is recorded dial. *trod* sb ‘tread’, ME are *throb*, *bob* (cp. *pop*), *dab* (cp. *tap*), *tug* (cp. *tuck*), obs. *nib* ‘pinch’ (cp. *nip*). Newer are *pod* 1530 ‘prod’, *ploid* 1562, *pad* 1594 ‘dull sound of steps’ (cp. *pat*), *thud* 1513, *dib* ‘dab’ 1609, dial. *dod* ‘beat’ 1661, *chug* ‘sound of oil engine when running slowly’ (var. of *chuck*).

Opposition of voiced and voiceless final is not, however, a regular derivational pattern.


In *dandle* 1530 and *dangle* 1590 the sense ‘move to and fro’ etc. is obviously derived from the idea of the moving bell which sounds *ding-dong*. The ablaut form *dingle-dangle* is first quoted 1598 but may be older.

7.11. /r/ in the middle or at the end of a word imitates and symbolizes continuously vibrating sounds. The frequency of vibration is, however, considerably lesser than that of the /z/ symbol. OE are *chirk* (OE *cearcian* ‘grate, creak, croak’), ME are *chirp*, *chirt* (Sc), *snore, snort*. Then come *purl* 1586, *chirrup* 1579, *purr* 1601, *churr* ‘trill like a grasshopper’ 1639. Cp. also sf -er.

7.12. /l/ at the end of a word symbolizes prolongation, continuation and is chiefly developed in sf -le, but is also found in simple words such as *wail, pule* ‘shimper’, *warble, trill, yodle, purl, chirl* ‘warble’ (Sc), *bawl, meowl*.

7.13. /z/ at the end of a word imitates low toned noises characterized by high frequency vibration, as streaming air, the sound made by a bee, by an approaching grenade, an arrow, and in a few words the hissing sound of sputtering fat or oil. The symbol is apparently not older than ME (OE *hwinsian* means ‘whine’, *hwōsan* ‘cough’). ME is *buzz*. Later are *wheeze* 1460, *whiz* 1547, *fizzle* 1532, *drizzle* 1543, *huzz* ‘buzz’ 1555, *fuzz* ‘loose volatile matter’ (as in *fuzz-ball*: the /z/ is expressive of the whirled about little particles), *fizz* 1665, *sizzle* 1603, *frizz* 1835, *frizzle* 1839.

7.14. /s/ is a weak symbol. *Kiss* is recorded from OE while *kiss* and *siss* are ME. Newer is *buss* ‘kiss’ 1570 (similar words in other languages, as L *basiare*, G *kissen*, G dial. *Busserl*, Tu (= Persian) *puse*).

7.15. /ʃ/ in final position after a short vowel imitates the voluminous sound of rushing air, gushing water, and hence is used expressively for violent movements, esp. blows which are supposed to be accompanied by a rush of

7. 16. The role of the vowels is different from that of the consonants. In direct sound imitation the vowel denotes the pitch, volume, timbre, of the imitated sound. But whether the sound is sharp, cutting, vibrating etc. is indicated by the following consonants.

A high (or thin) tone is rendered by /i/, as in *hiss, swish, whimper, whine, click, clip, clink, tick, ting, titter.*

Low pitch is rendered by back vowels, as by /o/ or /ɔ/ in *knock, blob, pop, plop, flop, plod / bawl, roar, snore, snort, caw, by /o/ in moan, groan, by /u/ in hoot, toot, boom, coo, whoop, whoosh, croon, tu-shoo 'call of an owl', by /au/ in howl, yowl.

Indistinct low pitch is expressed by /ʌ/, as in *hum, drum, thrum, bump, plump, flump, bubble, grunt, grumble, gulp, guggle, puff, gush.*


Clear and distinct sharp medium sounds are expressed by /æ/ (= OE, ME /a/), as in *bang, tang, twang, rap, tap, slap, pat, crack, clatter, patter, cackle, crash, clash.*

Volume and length of a sound are expressed by a lengthened vowel or diphthong: *hoot, toot, boom, coo / moan, groan, drone / whine, chime / snore, snort, bawl, cau, roar, drawl / growl, howl, yowl.*

Short noises are rendered by short vowels (see preceding word lists). The sounds occurring today are [æ, ə, ı, ɔ, ʌ]. The EMoE sound [ir] has in PE developed into [ə(ɔ)] and is no longer expressive of sound. Shortness of the vowel [i] sometimes connotes thinness, as in *cling, tink* a.o. Pitch and volume of sound meet here.

7. 17. With verbs of movement we observe the following tendencies: quick, rapid movement usually goes with short vowels, slow movement goes with long vowels. It is impossible, however, to affirm anything as to the difference between the vowels.

Short vowels, chiefly in combination with final plosives, are used to express rapid movement, as in *hop, hobble, skip, snap, snatch, snatch.* Cp. also the above lists of word sounds in which many verbs denote sound as well as movement: *tap, rap, pop, plop, flop* etc.

Apparent exceptions are verbs with the suffix -er and -le, such as *patter, titter, sizzle, tickle.* The /s/ express repetition, continuation of short, rapid movements, though secondarily the idea of slowness or length may arise.

Long vowels go with slow or long movement, as in *flow, float, fleet* (cp. *flit which is obviously its counterpart though it is much more modern), *teeter* (cp. *titter), *slide, glide.* The long vowels are hardly accidental. We may ‘pull’, but not ‘draw’ with jerks. *Water seeps (or *sipes, dial.), and *seep, *sipe* are perh. nothing but the lengthened counterparts of *sip, though *seep is only used intransitively. The preceding observations naturally apply only to such words
as were presumably coined symbolically. I stress this just to counter the possible argument that long vowel is not necessarily combined with drawn out movement (as move, throw etc.) resp. short vowel with short, quick movement (as look, lift etc.).

7.18. The imitative principle is often misunderstood or misrepresented. It is commonly thought that an onomatopoeia should be the exact rendering of the corresponding noise. The explanations as to the differences in languages is that “our speech organs are not capable of giving a perfect imitation of all ‘unarticulated’ sounds” and that therefore “the choice of speech sounds is to a certain extent accidental” (Je La 20. 3, a little differently Grammont TP 377). This is, of course, right, but only partly. It overlooks the fact that an onomatopoeia is not a mere imitation of a sound.

7.19. Here it is necessary to touch on a question that has been much discussed. Ferdinand de Saussure¹ maintains that the sign is arbitrary, i.e. it is not motivated by the significate, that onomatopoeias are never organic elements of a linguistic system, that they are few in number, and that their coining is to a certain extent arbitrary as well. Charles Bally² modifies Saussure’s standpoint, admitting the ‘signe motivé par le signifiant’ for onomatopoeias. This means that an onomatopoeia, say crash, evokes the idea of the characteristic noise implied by the word crash. This kind of motivation will hardly be called in question, but it has no bearing on word-formation. The point that interests us in wf is to know which particular phonemes are used in a language for the coining of words and what the symbolic value of the respective phonemes is. This will lead us to the question whether a certain idea may not necessarily call for a certain sound; in other words, we will want to know whether there is no motivation of the sign by the significate. I have discussed this point in a paper ‘L’étude des onomatopées’³ and tried to show that while certain morphemes are understandable in a certain linguistic system only, there are others which in slight variants are used in many languages.

The foregoing remarks upon symbols and their connection with sound and movement have already shown that to a certain quality of sound there necessarily corresponds a certain linguistic symbol. Vibrating noises can be rendered by nasals, r or z only, while anything else as a symbol is excluded. A hissing sound will invariably be rendered by some s sound, and so on.

7.20. Onomatopoeias are not coined haphazardly. Their composition is determined by the system of the language to which they belong, which partly accounts for the differences of words for the same concept in different languages. Such onomatopoeias have usually one or more elements in common (E whisper, G flüstern, Tu fisildamak, L susurrare etc.) which are those that have imitative character. But there are also elements which differ from one language to another. As every language has its own phonological system, onomatopoeic coining is largely dependent on the phonemes and phonemic combinations of the language. Words with the initial symbol /hw/ which are frequent in

¹ F. de Saussure, Cours de linguistique générale⁴, 101—102.
² Ch. Bally, Linguistique générale et linguistique française⁵, 127—139, Bern 1944.
English would be impossible in French or German, words with initial /kn/ which are frequent in German are no longer possible in English, and so on.

7.21. An onomatopoeic word is a compound of several symbolic elements. Take the word bang, for instance: the /æ/ rendersthe sound the slamming of the door causes, the /ŋ/ is imitative of the vibration of the air following it. The /b/ is expressive of the bluntness of the explosive sound (a sharp sound would have been introduced by a /p/, cp. G păng-păng 'sound of rifle-shooting'). The initial symbols place a word in a certain semantic group, which is that of the 'blow' class in our case. Words without an introductory symbol, i.e. onomatopoeias which contain one element only, are rare. In Turkish, the crowing of the cock is rendered by /ööröö:/, in German, the braying of the jack ass is expressed by /i-a/.

7.22. What we call symbols is another aspect of what is traditionally termed the question of roots. There are many IE or Germanic "roots", in dictionaries listed as *glīm, *glînt, *glīs, *glant etc., etc. I have preferred not to speak of roots but of symbols, i.e. I have split up the roots into their components because in my opinion roots are not indivisible units, but are composites just as much as fl-ash, fl-ick, with modification of the vowels or the consonants.

7.23. New words may be derived by internal change, chiefly ablaut alternation (as tip from tap). The principal method, however, is that of symbol blending. The analysis of the expressive values of various speech sounds as given above (7.21) should not lead us to think that an expressive word is formed by just putting together several expressive sounds. As a matter of fact, it is only two morphemic elements that play a relevant part: the initial symbol, i.e. the consonant(s) preceding the vowel, and the final symbol, i.e. the vowel and the final consonant(s).

7.24. If we take the word flēp 'dart' 1594, we find that its coining was suggested on the one hand by other words with the initial morpheme (here called 'symbol') fl-, as flēck, flēt, flēp, flēsh (all ME) and on the other hand by words with the final symbol -ip, as hip 'hop' 1250, skip 1300, whip, orig. 'move the wings briskly' 1250, rip 1477, all expressive of brisk, quick movement. Though several of the simple symbols appeal to us at first sight to be imitative or expressive, it should be noted that most simple symbols, and all compound symbols, are nothing a priori, but have developed morphemic character from the more or less accidental grouping of semantically related words. In fl- there is nothing to suggest flying or flowing movement, but in the co-existence of flōw, flēet, flētter, flēy, flēe, flēot (all OE) lies the germ of all the new words expressive of movement which were coined in ME. The symbol -ip, through the short vowel combined with the following plosive, is in itself a more convincing expression of the concept 'brisk movement'. But this is a mere coincidence and does not involve a principle.

7.25. Eugene Nida\(^1\) rejects the morphemic value of such initials as sl, fl on the ground that they do not occur ... with forms which occur in other com-

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combinations. The argument holds good insofar as, indeed, symbols have not the standing of words, prefixes or suffixes which are full morphemes and combine into bimorphemic units (tea-pot, un-do, child-hood). Symbols differ from full morphemes in that they combine into units which are not syntagmas in a grammatical sense, but monemes (one-morpheme words). This is a feature that expressive words have in common with other types which are usually treated in word-formation: blending of non-expressive words (type motel from motorist hotel) and manufactured words (type NATO from North Atlantic Treaty Organization). This reservation granted, it is hardly possible to deny the morphemic character of expressive symbols. Zellig S. Harris¹ seems inclined to admit them on account of meaning correlation in some words, but basically he holds the same argument Nida uses. A paper by Dwight L. Bolinger² is much nearer the ideas set forth here. But while I regard morphemes as Saussurean signs, i.e. phonetic-semantic entities, and restrict the morphemic character of initials and finals to symbol-coined words, Bolinger carries the principle much farther, tentatively considering as morphematically related also such words as, sh/utter and m/utter (with the same morpheme or, as he calls it, phonestheme utter), b/low, b/reak, and b/eat (with the morpheme b). On the other hand, as he has not limited the morpheme character of such elements to expressive words, he finally sees himself compelled to dismiss these elements from strict morphematic analysis. The initial symbol must be considered the determinant while the final symbol is the determinatum.

7. 26. According to whether the initial (as /fl/) or the final (as /1p/) is considered, symbolic coinings form an alliterative or a riming group. We shall treat the initial symbols first. As pointed out in 7. 24, they are morphemes occurring with a group of semantically related words. The initial /bl/, for instance, introduces many words that stand for the idea 'blow, swell'; /sp/ is initial with many words expressive of the idea 'spit, reject', and so on. Some of the symbols are obviously of imitative origin, as /b, p, m/ which partly stand for the opening of the mouth or the position of the lips, /g, k, hw/. Others seem to be of emotionally expressive origin as /tš/, /dz/, (partly) /p, f, m/. With the majority of symbols, however, the morphemic value appears to be the secondary result of grouping, as we have already pointed out.

General remarks on initial symbols

7. 27. The s- groups need special mention here. Absence or presence of initial s before liquids and stops seems to connect a few words in the Indo-European languages. E slime and its Germanic cognates are probably related to L limus, G schmelzen (OHG, MHG smelzen) and its cognates apparently belong together with E melt. E smelt 'melt', first recorded 1543, may be a loan from Dutch, but it may equally well represent a more recent variant of melt. Old

Greek had smýxón beside mýxon, smýraina beside mýraina (both fish names), smyrızô beside mýrizô ‘anoint, perfume’, smílax beside mìlax ‘yew tree’, smygerós beside mogerós ‘miserable, wretched’, smíkrós beside mìkrós ‘small, little’ (the derivative smíkrinès ‘miser, niggard’ has no by-form without s).

We know nothing about the origin of the variation. The s may originally have been imitative of the sound accompanying a movement (cf. melt/semelt where the process of fusing metal, for instance, would suggest such an idea). One might also think of an emotively expressive origin (cf. mogerós / smygerós and mìkrós / smíkrinès). For English example of word pairs see below 7.83.

7.28. The initial symbols sometimes overlap as do other morphemes. This is especially so when the final symbol is particularly strong. For the concept ‘trifle’ we have fiddle, twiddle, piddle (with their variants peddle and paddel), and quiddle, all recorded in the 16th century. The basis may be fiddle which attracted the otherwise unexplainable variants. It will be noted, anyhow, that the final symbols, as containing the vowel, are the real ‘roots’ while the initial symbols have the modifying character which prefixes have with radicals. This will be more clearly understood in the chapter on final symbols.

7.29. Sound-imitative initial symbols frequently have counterparts in other languages: /b/ occurs in OGr bè ‘the bleating baa of sheep’, bombos ‘dull noise’, L bombus ‘dull noise’ (hence the various ‘bomb’ words), bôlare ‘bleat’, LL bombitare ‘hum’, ML baulare, F bêler ‘bleat’, boubou ‘cry of the owl’, boum ‘sound of a drum’, bondir (in Old French = ‘resound’), G bum, bums, bimmeln etc. Initial /t, d/ for the concept ‘strike against’ is frequent in many languages, cp. the widely used root tok ‘strike’ in the Romance languages (see Romanisches Etymologisches Wörterbuch, von W. Meyer-Lübke, s.v. tok), in Turkish the same root occurs in tokmak ‘knocker’ and other words. Initial /kl/ with words denoting vocal and other noises is found in OGr klôzo ‘cluck, click’ and other variations of the ‘root’ kal (kaleô, klazô, kleizô etc.), L clamo, clangor, LL cloca ‘clock’, LL clôppus ‘lame’ (apparently from the clapping noise of the limping foot), F claquer (15th c.), clôc-clâc ‘clack’, clapper ‘clap’, clapet ‘kind of valve’ (1517), G klack, klapp, klipp-klapp, klatschen etc. The initial /kr/ also has counterparts in other languages: OGr krazô ‘scream’, krizô ‘scream, shriek, crack’, kôtalôn ‘braggart, a rattle instrument’, L crepare, *critare (= F crier), F craquer 1546, cric-crac ‘noise of breaking or tearing something’ 1520, cri-cri = criquet ‘grasshopper’ (12th c.), croasser ‘croak’ 1564, crin-crin ‘jarring violin’, G krachen, kreischen etc.

7.30. Many of the symbols go back to OE and correspond to symbols in cognate Germanic languages. On the other hand, the symbolic words we use today are chiefly ME or later. This may be so because traditional OE literature refrained from handing down such popular or colloquial words, or just because there were not more in OE. This cannot be decided with certainty. It cannot, however, be denied that present-day speech habits favor such coinings very much. There is the recent AE word stash away ‘hide away’ which is obviously from stow, stack plus dash. The OED has another stash ‘stop abruptly’ 1811, obviously blended from st(op) and (d)ash. The initial /sp/ is already Indo-European with words denoting ‘spit, reject’ (L spuo, OHG spiwan, Gothic
speiwan, OE *spiwan*), but /spl/ is much later. Through the blending of *sputter* and *splash* we get the word *sputter* 1677 which was later followed by *splash* 1715 and *splatter* 1784.

7. 31. To deny the word forming character of initial symbols is hardly possible. Many of the words listed under the respective symbols are usually considered as of uncertain or obscure origin. Now, I am not pretending to furnish a method by which everything unknown is explained as ‘symbol-blending’. But if we consider how many words suggestive of the same idea are characterized by the same symbol, it is impossible to deny that the coinage was prompted by the symbol. To say that an initial may introduce a lot of other ideas would not be to the point. Initial *sp* is certainly found in *speed, spin, spot, span* etc. where the idea of symbol is absent. But then, /au/ in *shout, howl, yowl* is suggestive of a long-drawn and loud sound while in *house, mouse, lout* etc. there is no such implication. There is no common semantic feature in *speed, spin, spot, span* whereas words with the symbol /sp/ have a common semantic denominator.

**Initial symbols**

7. 32. /p/ is the voiceless variant of /b/. Directly imitative of the parting of the lips in the rendering of some vocal sounds, it may also be used for strictly explosive vocal sounds, and finally be expressive of explosive noises in general. OE are *pyfian* ‘puff’, *punian* ‘pound’ (apparently from the sound), *pipian* ‘blow the pipe’. Later are *pipe 1250 = peep 1460* ‘cry of young birds’, *puff 1225, purr 1620, purl (said of a brook) 1586, pipit (a bird) 1768, pop 1386, dial. *pash 1382, pat ‘dab’ 1400 sb (vb = 1567), patter 1394, orig. ‘recite prayers’, representing *pater = paternoster*, but at the same time an onomatopoeia, *pang 1526* (obviously symbolic for ‘shot’ — like *pain*, cp. G *päng* for the sound of a rifle shot), *pad ‘dull sound of steps’ 1594* (obviously a variant of *pat* and *bat*), *pitter dial. ‘make small sounds, as a grasshopper’ 1592, ping 1886, ping-pong 1900, *pom-pom* ‘machine gun’ 1899.

Words denoting movement in which the original character of sound-imitation has more or less disappeared are *pick* (OE in sense ‘to puncture’), *peek 1382, and pop 1386.*

The sound /p/ is emotionally expressive in *piddle ‘trifle’ 1545.* The word is probably a variant of *fiddle* which is recorded with the same sense in 1530. Ablaut variants are *paddle* (in the now obsolete sense ‘trifle’), and *peddle ‘trifle, dally’ 1545.*

7. 33. /pl/ is found with several words conveying the idea of dull impact, chiefly in connection with water. The symbol does not seem to be older than ME: *plump 13., (plunge 1374 is fr. OF plunquier which is itself partly onomatopoeic)*, *plash 1513, plod ‘walk heavily’ 1562, plop ‘drop into water without splashing’ 1533 = *plap 1846.* AE is *plodge ‘walk in mud or water, plunge’ (ADD) which is obviously a blend of *plod* and *plunge.*

*Pluff ‘strong puff’ 1663* is Scotch.

7. 34. /pr/ is the initial symbol of a number of words with the basic meaning ‘prick’, as *prick OE, prickle in obs. sense ‘a thing to prick with’ OE, prong*
1492 (with sound imitation of the metallic sound, cp. obs. prong and prang in sense ‘pang’ and the word pang itself), prod 1535 with the obs. variants proke 1225 (obviously an ablaut variant of prick) and prog 1600 (with the voiced final of proke).

In a few sound words it seems to be a variant of [br], app. with the connotation of greater liveliness: prate 1420 seems to be MDU praten; an English coinings is its frequentative prattle 1532, while pribble and prabble (Sh) are variants of obs. brabble.

7. 35. /sp/ is found at the beginning of many words expressing jet movement. Many of the words imply the idea ‘reject’ or ‘spit’, as spew, spit, spurn ‘scorn’ OE. The symbol is Indo-European. Exs are spout 1330 (a variant of sprout 1200), spurt 1570 = spirt 1582 ‘issue in a jet, squirt’, spatter 1582, spattle 1611, spirtle 1603 (now dial.), sputter 1598, spawl ‘spit coarsely’ 1598 (arch.), spurtle ‘burst out, spirt’ 1633, spat ‘start up sharply’ etc. (AE) 1809. Spang ‘spring, leap’ (north. E and Sc.) is termed ‘of obscure origin’ in the OED, but it is probably an onomatopoeic coining, consisting of the symbols /sp/ and /æ/; the word is originally used with reference to the string of the bow or an arrow. Its variant is spank 1727.

7. 36. /spl/ is a modern symbol. It combines /pl/ and /sp/ in splutter 1677, splash 1715, splatter 1784, splatch ‘splash, patch of color’ 1665 (AE and Sc), vb 1825, splat ‘pat, slap, spat’ (ADD, 1941), splash ‘splash’ (ADD, 1818), splodge ‘trudge or plod splashily through mud or water’ 1859 (an ablaut variant of splash with intensifying voiced final), splunge ‘plunge’ 1839 (AE and E dial.). AE splurge ‘ostentatious display’ 1832 is termed ‘imitative’ in the OED, but I cannot account for the final symbol. Splotch 1601 is a blend of blotch and spot, its variant is splodge ‘clumsy splotch’ 1854.

7. 37. /spr/ is a variant of /sp/, with about the same meaning. It introduces words with the general meaning ‘spread’, as in OE sprytlan and sprylan ‘sprout’, sprengan ‘sprinkle’. The vb sprout is not recorded before 1200, but the word is certainly OE, too, as the second pto äsproten does occur. Spring, sprawl and spread also go back to OE. Newer are springle 1502 (now rare or arch.), a variant of sprinkle 1400, besprinkle 1440, obs. bespring ‘besprinkle’ 1387, all frequentative ablaut variants of obs. spreng, bespreng ‘sprinkle, besprinkle’.

7. 38. /b/ may originally represent merely the sound made when the mouth is opened and at the same time imitate a softened explosion of sound (see its voiceless counterpart /p/). It is found in many languages (see above 7. 29) as an initial of words denoting sound, as in bark, bell, bellow, belch (OE). Exs are bumble 1230, obs. bumble ‘buzz’ 1386, buzz 1398, boom ‘hum, buzz’ 1440, dial. bum ‘hum loudly’ 1450, buzol 1556, bow-wow 1576, baa ‘bleat’ 1586, the exclamations boh, bo, boo, booh. Imitative of sound are also bull 1200, bat sb ‘stick’, vb ‘strike’ 1440 (cp. pat) and buss ‘kiss’ 1570.

Originally imitative of sound, but now primarily expressive of the accompanying movement are bob ‘strike, rap, tap’ 1280 (cp. pop), bang 1550, bump 1566, obs. bum ‘strike, knock, thump’ 1579, bash 1641, bubble 1400 and its obs. variant burble 1300.
7.39. /bl/ is an initial symbol with many words expressing the idea 'blow, blow up, swell', as in OE blow, blast, bladder, blain (chibblain). The symbol was strengthened by the loans blaze in obs. meaning 'blow' 1384 (= ON blása) and blister 1300 (= OF blestre 'tumor'). A variant of blister is bluster 1494. Other words are blurt 1573 and blore 'violent blowing' 1440 with the same imitative final as snore.

/bl/ in combination with /l/ is often used to imitate, with the protruded lips, the noise of a bubble, also the bubbling sound of confused blubber. Hence we have the idea 'blubber' on the one hand and that of 'swelling of the lips, swollen lips', sometimes also 'blob' (i.e. the concrete thing itself seen as a protruding shape, as a bubble, a blot or the like. Cp. L balbus 'blubberingen', balbutire 'blubber', bulla 'bubble, nob' etc.) on the other. Perhaps this is really at the root of 'blow up, swell'. Exs are blubber 'bubble up, give forth a bubbling sound' 1325, blub 'swell, puff out' 1559, obs. blabber 'bubble, mumble' 1362, blabber-lipped 'with protruding lips' 1377 = blobber-lipped 1593, blab 'chatterer' 1374 (Ch.), later 'babbling, loose talk', blob 'mark with a blob of ink or color' 1429, sb = 'bubble, pimple' 1536, its variant blob 1607, its obs. variant blab 'blister' 1656. Blizzard 1829 belongs to the 'blow' class, with the -izz of whizz, fizz plus sf -ard.

There are several words denoting vocal sounds with the initial /bl/: bleat OE, blea 'bleat; cry piteously, as a child' 1568 (obs. exc. dial.), blather = blether ME (which is, however, prob. f. ON bládra), blatter 'speak or prate' 1555 (the OED assumes L blaterare as the etymon and additional imitative influence; the word is formed like patter, smatter etc.), blat 'babble, prate' (Pepys). The ADD records blatter 'speak volubly', blat 'bleat'.

7.40. /br/ is found with a few words expressive of unpleasant noise: brack 'noise, outcry' 1200, its variant brag 1360, brawl 1375, obs. brabble 'brawl' 1500, obs. brangle 'brawl, wrangle' 1600, brash 'sickness arising from disorder of the alimentary canal; sudden dash of rain' 1573.

7.41. /t/ is a variant of /d/ and chiefly found with words denoting sound produced by a smart stroke against a body. Exs are tap 1225, tink 1382, tinkle 1382, tingle 1388, tittle 1399, tick 1430, tattile 1481, tip 1466, ting 1495, toot 1510, tuck (of a drum, 13., not "a. ONF. tokar, toquer", as the OED has it, but an independent development of the widespread symbolic root tok)¹, tickle 1330 (prob. orig. 'a series of ticks = light touches'), tang 'strike a bell' etc. 1556, tick-tack 1549, tittle-tattle 1529, titter 'laugh' 1619, tootle 1820 (frequ. of toot), too-too 1828 (with the additional nuance of depreciativeness), tum 1830, with the reduplication variants tum-tum and tum-ti-tum 1859 to denote the sound of a drum, or a stringed instrument when plucked.

Initial /t/ is sometimes emotionally expressive, i.e. the 'stroke' is figurative: tush (an arch. exclamation of impatience) 1440, tiff 'outburst of temper' 1727, tosh 'bosh' 1892 (variant of tush and bosh). Obs. tiff 'drink, sip' 1769 is a blend of tipple and the imitative symbol /lf/.

With verbs of movement /t/ is infrequent: dial. titter 'totter' 1374, its ablaut variant totter 1200, its U.S. variant teeter 1846, toddle 1600, tottle

¹ See W. Meyer-Lübke, Romanisches Etymologisches Wörterbuch s.v. tok.
VII. Phonetic Symbolism

‘totter’ (ADD), all words expressive of unsteady movement. No vb *tot is recorded in OED, but there is an adj tatty ‘unsteady, shaky’.

7. 42. /tr/ introduces a number of words with the basic idea ‘tread’. OE are tread, trod sb, trap (prob. orig. sound imitative). Later we have tramp 1388, trample 1382, trip 1386 (the OED gives OF triper, treper as its etymology; the word is prob. nothing but the ablaut variant of trap, as the sense ‘cause to fall’ also points out), troll 1377 ‘stroll’, trudge 1547. Trot is app. OF trotter.

7. 43. /st/ is an old IE symbol that has formed many words with the basic idea ‘stand’ and ‘step’ which are common Indo-European property (OGr root sta-, L root sta- etc., in English represented by such words as stand, step, stead, sty etc.). Apart from this common stock, English has only a few new formations, as stumble 1325 (see -umble 7.81), stamp 1200 with variant stomp (the word is not recorded in OE, but the ablaut form stompan ‘stamp’ is). Both words are obviously mere sound imitations with the symbol /st/, and as the initial symbol is common in Indo-European languages, it is no wonder that parallel words should be found in so many languages; see the entry stamp in the OED. The OED establishes asterisked OTeut. forms for the word. Newer are stodge ‘stuff, gorge’ 1674 (for the symbolic value of -odge see -udge), stash (st- plus -ash), AE (H. Melville a.o.). OED has another stash ‘stop abruptly’ 1811 which is a blend of st(ay, stop) plus -ash.

7. 44. /str/ forms several groups with the initial: the ‘stride’ group is represented by straddle 1565 = dial. strode 1607, perh. ablaut variants of striddle ‘straddle’ etc. 1530 (the latter is either a freq. of stride or back-derived from striddling), stroll 1603 (the second element is that of roll, loll etc.). Straddle 1386 is a blend suggested by stride and obs. tuggle ‘tug’. Strum 1775 was suggested by strike, while the final is that of drum, thrum.

7. 45. /d/ introduces words denoting the sound produced by a stroke against a body. The sounds, however, are not sharp or smart as with /t/ words. Exs are din OE, dash 1290, orig. ‘strike, smash’, dumph ‘fall heavily’ 1300, dab ‘soft blow’ 1300 (cp. tap), its freq. dabble 1557 ‘paddle, bespatter’ (sense influenced by dribble), the ablaut variants dib 1609, dibble 1622, arch. ding ‘knock, hammer’ 1300, ding-dong 1560, dial. dod ‘beat’ 1661.

Like /t/, initial /d/ is found with a few words expressive of unsteady movement which are often variants of /t/ words: north. E dial. didder 1375 ‘quake, quiver’ = dial. dither 1649 = diddle 1632, its ablaut variant dodder 1617, dial. dodle ‘walk totteringly’ 1787 = StE dodle 1653.

As the ding-dong of the bell is connected with the idea of swinging movement, the formation of words suggestive of swinging movement is made possible: dangle 1590, dandle ‘move lightly up and down’ 1530 (cp. MF dendir ‘little bell’ and se dandiner ‘swing about one’s body, swagger’).

In dindle 1440 ‘tinkle; ring; tingle (as with cold or pain) = dingle 1573 there is only the idea of sound, resembling the one caused by the ringing of a bell.

7. 46. /dr/ introduces many words with the basic meanings ‘drop’ and ‘drive’, as OE drösan and drūsan ‘fall’, drēahnian ‘drain’, dragan ‘drag’, drejlian ‘drive’, dros ‘dross’, draught, draw, drive, drop, drip, drain (all OE).
Droop 1300 and drags 1300 are prob. Norse words, drag 1440 may be a northern English variant of draw. Draggle 1513 is the frequentative of drag with the semantic influence of drabble 1400 (which seems to be a loan from Low German). Variants of drop are drib 1523 (obs. as a vb, but used as sb), dribble 1565, dripple 1821. With another final we have the symbol in drizzle 1543. Drown 1300 may come from the /dr/ of drink, drench and down.

The symbol is seldom used with words denoting sound. There is OE drēam ‘music, melody’ (—1330). Modern are drum 1540, drawl 1597 (at the same time suggesting draw and the final symbol -awl; the OED assumes Du or Low German origin).

Drool ‘drivel’ 1847 is explained as a “contracted form of drivel” (OED), but the explanation does not sound convincing. I have none to offer myself.

7. 47. /k/ is chiefly found with words denoting vocal sounds, as in the Indo-European root, kal, kla (OGr kalō, L clamo etc.). OE are call, cow (after the sound), kiss. OE céo ‘jackdaw’ is now cough and means ‘crow’. More recent words are cackle 1225, cough 1325, cuckoo 1240 (imitates the cry of the bird. The word need not be considered a loan from French, as the OED has it; it was coined anew from OE гëac as was G Kuckkuck fr. OHG guan, MHG gouch), caw 1589, coo 1670. In north. E dialects we find /k/ (instead of southern [tʃ]) in kink ‘gasp for breath’ fr. OE cinian, kinkcough ‘whooping-cough’.

For dial. cack 1436 the OED assumes L cacare as the etymon. Kluge (EW) derives G kacken from L cacare, too, as a jocular student’s word. But the word is found in German dialects, and Modern Greek has kaka ‘excrements’. Are all these words from Latin?

There are a few words denoting movement: cuff ‘strike with the fist or with the open hand, buffet’ 1530 (with the -uff of buff, ‘blow, buffet’, cp. G knuffen, puffen ‘prod’; the OED terms the word ‘of uncertain origin’; Weekley derives it from F coiffer), kick 1380 (with the -ick of pick, prick, perhaps at the same time imitative of sound: the first instances of OED occur in such phrases as kick against the spur and kick against the prick). The word cut (first rec. 1275) is unexplained. Various etymologies have been suggested. It is prob. a symbolic word. Quite similar is the Tu onomatopoeia for the sound of scissors cutting something: kit kit (a represents a high back unrounded sound). There is no need to assume an OTeut. root *kut-, *kot- (OED).

7. 48. /kl/ is a frequent initial with words denoting sound. OE are clipian ‘call’, clatian ‘clatter’, OE chucge ‘bell’ probably belongs here, too. Newer are clack 1250, clap 1225, cluck 1491, clash 1500, click 1581, clutter 1556 (var. of clatter), clang 1576, clank 1614, clamber, clamor ‘bell-ringing’ 1611, clam ‘clang of bells’ 1674, clump ‘tread heavily’ 1665, click-clank 1790, clamp 1808 (diai. var. of clump), clomp ‘clump’ (ADD), cloop ‘sound of a cork drawn from a bottle’ 1848. Clip ‘cut’ 1200 denotes movement after the accompanying sound.

7. 49. /kr/ introduces words denoting jarring, harsh, or grating sounds or twisted movement or position. Crow, crane, and crack go back to OE. Later are creak 1325, obs. crook ‘croak’ 1325, crake 1386, crush 1398, crash 1400, croak 1460, crackle 1500, crick-crack ‘repeated sharp sound’ 1565, obs. crunk
'utter a hoarse, harsh cry' (said of birds) 1565, *crick* 'sound of a grasshopper or the like' 1601, obs. *crunkle* 'cry like a crane' (freq. of *crunk*) 1611, *crump* ‘noise horses or pigs make when eating’ 1646, *crunch* (with AE dial. var. *craunch, cronch*) 1801, *crank* ‘make a jarring or grating sound’ 1827, *cronk* ‘cry of the wild goose’ 1878 AE, *crumb* ‘sound of bursting bomb or shell’ (World War II).

/kr/ is a widespread Germanic initial for words with the basic meaning ‘twisted, distorted, crooked’ (G krampf, krumm etc., Du kramp, kram etc., etc.). OE are *cringan, crincan* ‘draw oneself together spasmodically, *crank* (as in *cranc-staf*). There appear to be two ‘roots’: *cr.nk* and *cr.mp* in several variants. The word *crumpled* ‘crooked, curled’ is recorded from 1300 (the full verb occurs in the 16th c. only), obs. *crump* ‘curl up’ is quoted 1325 and is obviously a variant of *cramp* 1374 (for which the OED, quite unnecessarily, assumes OF *crampe* as the etymology, though the word is itself a loan from LG). Another variant is *crimp* 1398 ‘shrink, curl’. The root *cr.nk* is represented by the before-mentioned *crank, cringan, crincan, crenge* 1225, orig. ‘contract the muscles’, the predecessor of *cringe* (appearing in the 16th c. only), *crinkle* 1385 with dial. var. *crunkle* 1400, *crankle* ‘run zigzag’ 1594, *crinkle-crankle* ‘wind in and out’ 1598. *Crick* ‘spasm of the muscles’ 1440 contains the same semantic basis, but has as a second element -*ick* (of *prick, pick* etc.) which suggests sharp suddenness.

The idea of twisted movement probably also underlies *creep* OE (Kluge, EW s.v. *kriechen* has the same idea), which was followed by *crawl* 1300 (with the final symbol of *sprawl* (the OED suggests Norse origin), *crouch* 1394 (may be a blend of /kr/ and *couch*). *Crisp* ‘curl, twist’ is, however, L *crispus* which passed into OE as adj *crisp* and is first attested as a vb in 1340.

7.50. /sk/ is frequent with verbs implying quick, brisk movement, as *scour* ‘rush violently’, *skip, skit* ‘caper, leap’, obs. *scope* ‘skip’, *scuttle, scuddle, scud*, *scutter, scoot*, (helter-) *skelter, skedaddle, scamper*. But the origin and etymology of these words is too uncertain to allow any conclusions as to the word-forming force of /sk/ in English.

English coinages are prob. *skirr* ‘run away hastily’ 1548 (/sk/ plus -*irr*), *scurrty* 1810 (/sk/ plus -*urry*), *scuffle* ‘scrambling fight, tussle’ 1573 (/sk/ plus *ruffle, shuffle*). The OED supposes phonetic symbolism in *scud*; but final /d/ is not connected with the idea of briskness; we should expect a /t/ instead.

7.51. /skr/ is an initial symbol with words denoting unpleasant sounds or irregular movement. Partly a variant of /kr/, it is OE. Unlike *sk*, however, which resulted in ME [s], *skr* does not everywhere seem to have developed into [sr], as several word pairs with [skr] and [sr] exist in ME and MoE: e.g. *screw/shrew* (dialect.) fr. OE *scrēawa, ME crepe/cheape* fr. OE *screpan* ‘scrape’ (see OED s.v. *scr-*). *Scrith* ‘screech, shriek’ is not recorded before 1250, but prob. repr. OE *scrīc(e)an* (as *clitch* fr. *clycc(e)an*), with the roots /kr.k/, /skr.k/, cp. OHG *serian* = MHG *schrien* and MHG *krischen* ‘screech, shriek’. A variant of *scrith* is *scratch* 1474. Other words are *scream* 1200 (the /m/ is symbolic of the vibrating continuation of the sound; there is also the variant *scream* 1230), *scream* dial. ‘screech’ 1500 (prob. a variant of *creek*, not “a. ON. *skrēkja*” as the OED has it), *screach* 1560 (another variant of *scrith*), obs. *scranch*
'crunch' 1620, with AE dial. variant scrawnch (ADD), scroop 'creak, squeak' 1787 (/skr/ plus whoop).

Words denoting movement (with the basis 'scrape, scratch') are prob. orig. imitative of sound, as OE scrapian, screpan 'scrape', obs. scrat 1225 'scratch at a p.' (cp. OHG kraz̀ōn = G kratzen 'scratch'). Scratch 1474 is /skr/ plus cratch 'scratch' (now obs., 1320); scrawl 1380, orig. 'sprawl' is prob., as the OED also thinks, a variant of crawl; scrub 1595 is the symbol plus rub; scramble 1586 may be the symbol plus amble; scriggle 'wriggle, struggle' 1806 shows the symbol blended with wriggle. Scribble 1465 may in part be ML scribillare, but its adoption was certainly prompted by the symbolic value of /skr/. Its ablaut variant is scrabble 'scribble, scrawl' 1587. Scrawl in sense 'scribble' etc. (1611) is obviously influenced by them (the OED quotes scrawl 'scribble' as a separate verb, though leaving the possibility of identity open).

7.52. /g/ occurs almost only with words denoting guttural sounds or such as resemble guttural sounds. It is therefore chiefly found before velar vowels. Gulch 'swallow or devour greedily' (now obs. in StE) is not recorded before 1225 but is prob. older; the -ch seems to point to earlier -cian. Later are gulp 14... gush 1400, gaggle 1399, its ablaut variant giggle 1509, gabble 'jabber' 1577, gobble 1680 (said of a turkey cock), gargle 1562 = guggle 1611, guttle 'eat greedily' 1654, guzzle 'swallow liquor greedily' 1576, gurgle 1527 (may be infl. by F gargouiller). Gulch 'ravine, cleft' AE 1850 may be the same as gulch vb, the common denominator being that of 'swallow up'. Gab sb 'talk' 1681 and its dial. var. gob 1695 are prob. derived from gabble; whether gob 'mouth' 1550 is the same word or fr. Gaelic or Irish gob 'beak, mouth' (OED) is uncertain. Guff 'puff, whiff' 1825 is one of the many -uff variants, while guffaw 1720 with the unusual final sound, is orig. Scotch. Gong 1600 is a Malay word.

7.53. /gl/ is an initial with words expressive of the idea 'light, shine', as glass, gleam, gleed 'live coal', glisten, glow OE, OE glōm 'twilight of the evening', glare, glent 'glean, shine', glimmer, glimse, glisten, arch. glister, glittler, glim 'shine, gleam', gloat, gloom, gloss. I am not trying to explain these words which are based on common Germanic "roots" (gl.m, gl.t, gl.s with various vowels), but only want to point out the phenomenon of the common initial of the supposed "roots". As an English word-forming element we have /gl/ in 'look' words: obs. glaze 1601 (fr. gase plus glare, glance), glint 1440 as the ablaut variant of glent 13... glower 1500 (glow, glare, glance plus lower), glum 'look sullen' 1460 as a prob. ablaut variant of gloom 'look sullen' 13...

7.54. /gr/ is prob. of sound-imitative origin with words denoting deep-toned, grumbling, iminical or menacing noises, as occurring in OE grylan 'give a harsh sound', grin, grunt, adj grim and obs. grimly (OE). Later are growl (Wycl.), gruntle 1460, grumble 1586, gruff 1533 (prob. the symbol plus -uf though the word is orig. spelt grof). The symbol has been strengthened by loans such as groin 1300 (OF grognir, grogner), grutch 1225 (OF grouch). A variant of the latter is the now usual grudge 'grumble' 1450. Grum 'glum, harsh' 1640 is the symbol blended with glum. The word grous 'grumble' 1892, orig. military slang, is unexplained.
The symbol occurs in other languages as well, as in F *grommeler*, *grogner*, *grincher*, *grincer*, G *grell*, *greinen*, *grolen* (see KLEW under these words).

Whether the root *gr.p* 'grip' etc. has imitative origin (perhaps after the menacing noise accompanying the action) cannot be decided. MoE variants of *grip*, *gripe*, *grope* (OE) are *grab* 1589, *grabble* 1579, *grapple* 1530. An early variant of another kind is *grasp* 1382, obviously metathetic from *graps*, with the s we have also in *glimpse* fr. *glim* (cp. G *klapsen*, *tapsen*, dial. *grapsen* 'grasp').

7.55. *[f]* has not formed any larger group of semantically connected words. It is prob. imitative in *fart* 1250 (with many cognates in other Germanic languages), which was followed by *fizzle* 'break wind quietly' 1532 (this meaning is antiquated now). *Fuzz* 'loose volatile matter' 1600 is an ablaut variant of this onomatopoeic root, and *fuss* 1701 may be its voiceless counterpart, the common basis being that of 'a lot of light stuff'. *Fizz* 'make a hissing or sputtering sound' 1665 contains the thin-toned variant of *uzz* which we also have in *sizzle* (1603). *Fizzle* joined *fizz* in meaning about 1850 only. Obs. is *famble* 'stammer' 14... (with the -amb-le characteristic of unsteady movement, see -amb-le) and *faffle* 'stutter' 1570 (both with imitative force of the initial). *Fumble* 1508 is a variant of *famble*, as final -amb-le is a variant of -amb-le, *fuddle* 'tipple, booze, muddle' 1588 has the -duckle of *muddle, puddle*, but it seems difficult to tell what the initial stands for.

7.56. *[fl]* is an initial with words denoting movement, orig. flying or flowing movement, as in *flee, fleet, float, flicker, flow, flutter, fly* (OE). Coinages since ME have been pretty numerous: *fliit* 1200, *flush* 1300, *fling* 1300 (with the -ing of swing), *flap*, orig. 'slap' 1330, *flash* 1387, *flack* 'flap, flutter' 1393 (obs. in StE), *flack* 13... (obs. in StE), *flick* 1447, *fluster* 1422, obs. *flatter* 'float, flutter' 1375 with variant *fitter* 'fit, flutter' 1542, *fright* 1553, *flip* 1594, *flop* 1620, *flurry* 1698, *flump* 1790, *funk* 1823 (the symbol plus *funk* 'fight shy of'). *Flare* in sense 'shine, glare' is the symbol blended with *glare*, but otherwise the etymology of the word is not clear (it is first rec. about 1550). The sb *flag* 1530 is prob. a variant of *flack* vb.

7.57. *[fr]* can hardly be called a symbol though it is an initial with several symbolically coined words. *Frizz* 1335 and *frizzle* 1839 'make a sputtering noise in frying' are variants of *fizz*, *fizzle* (perh. influenced by *fry*). *Fridge* 'fidget, chafe, rub' etc. 1550 is a variant of unexplained *fidge* 'fidget, twitch' 1575 (partly influenced by *fray*). In *frump* 'sulk; derisive snort' 1553 we have the final symbol -ump, but the initial seems arbitrary, unless it is emotionally expressive. *Fribble*, orig. 'falter, stammer, totter in walking' 1627 has the -iblle which seems symbolic for small, continuous sounds or movements (*nibble, dribble*), but the *[fr]* is app. arbitrary. So is the initial of rec. AE *fram* 'pound, beat' (ADD, 1933). I cannot explain *frazzle* 'unravel' etc. 1825 (the OED connects the word with *fasel* 'unravel' for which it has, however, no quotation after 1643).

7.58. *[θ]* and *[θr]* have formed a few words, as *thunder* OE, *throb* 1382, *thrum* 1553. *Thud* 1513 is orig. Sc. with meaning 'gust of wind'; in sense 'thump' it is first recorded 1787.
7.59. /w/ is an initial symbol with words denoting unsteady, uncertain, to and fro motion. By the side of OE wægian ‘oscillate, shake’ (which resulted in now obs. waun), there seems to have existed an intensifying wægian which is recorded through wæg ‘shake, oscillate’ 1225. Variations of the stem are found in wigge 1225 and waggé (recorded 1594, but probably older). Waddle (now phonetically isolated) 1592 is explained by OED as a -le derivative from wade. This does not, however, account for the ‘swaying’, nor does it explain the absence of the element ‘walking through water’ which has been the only sense of the word wade since ME. I therefore think that waddle arose from a blending of wæg (waggé) and straddle 1565 (orig. ‘spread the legs wide apart in walking’). Wobble 1657 is perhaps waggé/hobble (OED suggests connection with dial. G wabbln) while dial. wangle ‘walk unsteadily’ 1820 is a blend of the /w/ of this group and final -angle (as in dangle). Wangle ‘obtain in some irregular way’ 1888 is not the same word, though it must have originated in a similar way, probably as waggé / dangle (waggé so that it comes loose, dangling).

7.60. /wr/ is the r-variant of /w/ and occurs with many old words expressive of the idea ‘twist, distort’, as wrench, wrest, wrestle, wring, wrinkle, all OE. By the end of the ME period, [wr] had become [r]. The only clear English coinage, however, seems to be wriggle 1495 (/wr/ -wiggle) which OED explains as “a. MLG wriggeln”.

7.61. /sw/ is an initial of many words with the basic meaning ‘sway, swing’, as sweep, swing, swingle sb, OE swæpan ‘sweep’, swengan = ME swengen ‘smite’. It is obviously a variant of /w/ which will explain the etymology of several words. The now dialectal word swag ‘move unsteadily, sway, wag (the head)’ 1530 which the OED cannot explain is prob. a variant of wæg. Sway 1300, orig. meaning ‘move’, is app. a variant of OE wengan ‘move’ (the modern sense of sway appears about 1500). ME and later coinings are swap ‘smite, strike’ 1350 = obs. swip 1205, swirl 1425, swagger 1590 (frequ. of swag), swinge ‘brandish, whirl, flog’ 1548 (a variant of older swengan), swash 1528 (orig. as sb with meaning ‘pig-wash’, i.e. obviously only a playful variant of wash; in other senses associated with the symbol /sw/), its ablaut variants swish 1756 and swoosh 1867. Swank ‘swagger’ 1809 is somehow connected with the group, but the etymology is not clear (it may be G schwanken, adopted as a slang term). Dial. variants of sweep are prob. swoop 1544 (cp. OE swæpan) and swipe 1825.

Swerve is OE sweorfan which had, however, the meaning ‘file, scour’. The present-day sense is first recorded 1330. The OED presumes that the sense existed in OE “since there is no known foreign source to account for it”. The nuance is possibly due to the symbolic force of /sw/ (cp. he swung aside, he swung round).

Switch is first recorded as a sb in sense ‘whip’ 1592. The word is app. onomatopoeic, but not suggestive of another English word. It may be a loan from Low German (in my home dialect (Krefeld) we have a word witsch ‘whip’; E switch may be the s- variant of some similar word).

Several /sw/ words have or once had the meaning ‘drink, tipple’, as swig ‘drink, liquor’ 1548, also as a vb, swinge (in sense ‘drink’ has quotations in the
OED between 1529 and 1649), *swink* (quotations between 1550 and 1590), *swipe* 1825 and *swizzle* 1813. The origin of this nuance is either to be sought in the idea of the movement of the arms when lifting a glass or in the association with the word *swallow* (which is less probable).

7.62. /tw/ is an initial occurring with several words denoting small sounds or small, chiefly twisting, movements. Many words denote tremulating sounds of birds or such as are caused by the plucking of an instrument, as *twitter* 1375 = *twiddle* 1863, *tweedle* 1684, *twang* 1542 (with dial. variant *twank* 1711), *twingle-twangle* 1634, *tweet* 1845. Dial. *twattle* 1573 and obs. *tuttle* 1577 'babble, tattle' are variants of *tattle*, *tittle* with the /tw/ symbol, while *twaddle* 1782 is a variant of *twattle*.

After *twitch* and *twick* (which is now dial.) 'pluck', *twinge* 'twitch, pinch', *twinkle* 'sparkle, glitter' OE, *twist* 1340 have been coined *twirl* 1598, *tweak* 1601 (app. the long vowel variant of *twick*; the spelling is no proof that the word was ever pronounced with [æ]; cp. *cleave*, *streak* and Jesp. I. 3. 245). *Twiddle* 1540 is orig. recorded in sense 'to trifle', prob. under the influence of *fiddle*, or of *twittle-twattle* 'idle talk'; the senses 'twist, twirl' are quite modern (1676).

7.63. /kw/ is initial with several words suggestive of the idea 'quack, quiver, shake', as *cweccan* 'shake, obs. *quetch*'; *quake*, *cweorn* = *cwyrn* 'quern, handmill for grinding grain', all OE, *cwavien* 'quave, quake' 1225, *quaver* 1430, its ablaut var. *quiver* 1490, *quag* 1579 (through *quagmire*), variant of *quake*, *quash* 'shake, crush, quell, splash' etc. 1387 (cp. P. Pl. C. XXI. 64 *The erthe quook and quahte*, q. OED s.v. *quash*).

A few words suggestive of harsh bird sounds are introduced by /kw/, as *quack* 1617 = *quackle* 1564—1578, *qua-bird* 'the Night-Heron of N. America' 1780.

7.64. /skw/ is the s- variant of /kw/. It introduces words expressive of discordant or discordantly eruptive sound, as *squeal* 1300, *squeak* 1547, *squash* 1565 (cp. *quash*), *squall* 'scream discordantly' 1631 (var. of *squel* which was prob. never [æ] as the spelling variants of the OED seem to point out, so *quall* was coined on the basis /-o-/), *squish* 1647 (var. of *squad* and its var. *squidge* 1897, *squitter* 1596, *squirt* 1460 (the symbol plus spirit), *squawk* 'cry with a harsh note' 1821, *squirk* 'half suppressed laugh; squeak' 1882.

Words denoting movement are *squirt* (see above), *squabble* 'wrangle, brawl' (with *-abb* denoting noise or confusion, see *-abb*, cp. also LG *kabbeln* 'quarrel*), *squirr* 1710 (cp. *skirr*, *whirr*), *squiggle* 1804 (cp. *wiggle*), all implying violent or distorted movement.

7.65. /h/ occurs with several sound words, many of them exclamations, as *ha*, *ho*, *hoop*, *heh*, *heigh*, *heigh-ho*, *hee-haw*, etc., *hoot* 1225, *hum* 1300, obs. *humble* 'hum' 1384, *his* 1388, *hush* 1400, *howl* 1450, *hizz* (var. of *hiss*) 'make a whizzing noise' 1583, *honk* 1843.

It is found also with words expressive of sudden, jerky movement, prob. orig. simply imitative of the breath-taking of persons lifting a heavy object with a sudden jerk. Obviously symbol-coined are *hop* OE, its ablaut variant *kip* 1250, *hobble* 1300, *hack* 1200, its var. *hag* 1400, their frequentatives *hackle*
1579 and haggle 1583 ‘cut, mangle by cutting’, higgle 1633 (ablaut var. of haggle), hitch 1440 (with the -itch of twitch), hug 1567 (with the -ug of tug, rug ‘pull forcibly’), huff 1583 ‘puff, swell’ etc.

This initial is frequent in rime-gemination, but only with the first-word: humdrum 1553, helter-skelter 1593, hubble-bubble 1632, hardy-gurdy 1749 a.o.

7. 66. /hw/ is an initial with words denoting noises of air or breath or forcible movement. Originally it probably renders the sharp sound of breath at the beginning of a vocal sound or of forcible movement and is thus somewhat parallel to /h/. For many speakers, /hw/ is no longer distinct from [w], so coinages of this group would belong in 7. 59. However, even for those speakers /hw/ has graphemic value, which has induced me to treat this initial separately. OE are whine, whistle, whisper; later are whirl 1290, whip, orig. ‘move the wings briskly’ 1250, whoop 1400, whirr 1400, whoop ‘cast, strike’ 1400, wheeze 1460 (cp. sneeze), whee ‘whistle’ 1475, whisk 1480, whish 1518, whimper 1513, whinny 1530 (var. of hinny 1400 which is perh. partly fr. F hennir), whizz 1547, whiff ‘puff, whistle’ 1591, whistle ‘blow in puffs’ 1568, whoop 1568, whoo 1608, whicker ‘snigger, titter’ 1656, whack 1721, whoof ‘gruff cry’ 1766, whoop ‘beat’ 1684 (Sc.), expressive of sound in StE 1844, whing ‘move with great force’ 1882, whuff ‘sound of a forcible blast of breath of wind’ 1896, whoosh ‘dull, soft, sibilant sound’ 1856, wheep ‘long-drawn sound of a steel weapon drawn from its sheath’ 1891, whir ‘sound of a bird’ etc. 1833, whing ‘high-pitched ringing sound’ 1912 (var. of whang).

7. 67. /m/ is found initial 1) with a number of words denoting movements of the mouth, usually accompanied by muttered sounds, 2) with words expressive of or connected with feelings characterized by a particular position of mouth or lips, and 3) with some words denoting animal sounds where the m is, so to speak, an anthropomorphic imitation (cp. initial /p/ and /b/). Exs are 1) murmur 1400 (which need not be considered “a. F. murmurer” (OED), ep. also OHG murmuron), obs. murr ‘a form of catarrh’ 1420—1756, mutter 1388, mumble 1362, mum 1377, munch 1374, mump 1586 (partly belonging in 2), at the same time) 2) mop (in mop and mow ‘make a grimace’), mope ‘be listless’ 1590, (prob. the variant of mop, although the OED denies the connection), miff ‘fit of ill-humor’ 1623. Miminy-piminy 1815 belongs here, /mi/ imitating the affected making of a “mouth” (in Turkish there is a similar expression for the same idea: [m typeof kirm] / 3) mew 1325 ‘utter the sound [mju]’, moo 1549, miaow 1632.

Mizzle ‘drizzle’ 1483 has the final symbol of drizzle while the /m/ is perh. that of mist. There is only the drawback of chronology as drizzle is not recorded before 1543, acc. to OED.

7. 68. /sn/ is initial with words expressive of sound and movement in connection with the mouth, nose or face. The starting-point is such words as OE snofl, snifhung ‘mucus of the nose’, snifjan ‘snite, clean the nose’. Snout is not recorded before 1220 but must have existed in OE as the denominal verb snifjan shows. The following are recorded later: snatch 1225 (the symbol plus catch), snatch 1300 (the symbol plus -ack), snap 1495 (the symbol plus final symbol -ap), sniff 1340, snore 1330 (as a vb 1400), snort 1366 (with in-
tensifying sf -t, as in grunt, fart etc.), snort 1388 ‘mucus of the nose, snuff of candle’ (in OE repr. through gesnot), snivel 1325 (in OE repr. by the vs sniflung), sneeze 1499 (certainly not “due to misreading or misprinting” (OED), but an adjustment to the symbol /sn/ from OE fnéosan), sneer 1553 (plus jeer 1553, see initial [dʒ]), snuff 1527, snarl 1550 which is the intensive of obs. snar ‘snarl, growl’ (1530—1596), snicker 1694, its variant snigger 1706, sniggle 1815, sniffle 1819. Snip 1586 is either the s- variant of nip 1393 or the ablaut variant of snapp; snap ‘nip, pinch’ 1588 may be a dialectal variant of the same. Snick ‘nip, nick’ 1700 is the s- variant of nick 1523, influenced by snip.

7.69. /sl/ is initial with many words expressing falling or sliding movement, as slide, slidder OE, OE slēfan ‘cause to slip’ = ME slēven (—1513). With the /sl/ of these were coined slither 1200 (var. of slidder), slive 1410 (var. of sieve fr. OE slēfan), slip 1300 (see -ip), slouch (1556 through slouch-eared, though other verb forms occur much later; the word is possibly a blend of the symbol and crouch 1394), slump 1677 (see -ump).

The same initial occurs with words denoting a falling blow, as slay, slughter OE, OE slītan ‘slit, split’. Symbol formations of this class are slit 1205, sling orig. hurl, throw’ 1290 (see -ing), slash 1382 (see -ash), slap 1632 (see -ap), slam 1691 (see -am), slob 1553 ‘strike hard’ (the symbol plus flo). A third group of words contains the basic idea ‘slimy, slushy matter’, repr. by slime, slough ‘muddy ground’, slip ‘soft, semiliquid mass, curdled milk’ etc. OE. Slop ‘muddy place’ etc. 1400 is a var. of slip; slobber ‘slime, slush’ 1400 is another variant. Later are slob ‘sludgy mud’ 1577 (diai.), slush 1641, sludge 1641 and its var. sludh 1669 ‘slush, mud’, slosh 1814, sloppy ‘splashy, semiliquid’ 1727.

7.70. /r/, in OE also /hr/, introduces a number of words expressive of loud, noisy or noisily vibrating sounds, as OE hrætele ‘rattle’, hrūtan ‘rout, snore’, rārian ‘roar’. In ring fr. OE hrungan the idea of ‘clear sound of hard metal’ is the earliest recorded. The initial has chiefly formed words with the first nuance, but there are also a few coinages denoting a crisp or hard sound. Exs are rap 1340, ram 1330 (see -am; the OED thinks of der. fr. ram ‘male sheep’), rumble 1384, rustle 1398, rabbie ‘speak in a rapid, confused manner’ 14.., obs. rough ‘cough’ 13.., ruckle ‘rattle in the throat’ 1530 (the OED assumes Scand. origin), rat-lat 1774, rub-a-dub 1787 and row-dow-dow 1814 (as an imitation of the sound of a drum), row-de-dow ‘din’ 1848, razzle-dazzle 1890.

Rash ‘dash, rush’ 1400 has the final symbol -ash while the initial may be that of run. Rush 1375 seems to be a variant of rash, one of the earliest meanings is that of ‘rush, dash’ (for parallels of this ablaut cp. dush 13.. = dash 1290, luss 1330 = lash 1330, crush 1398 = crash 1400). The OED derives the word from OF rëuser which, according to Bloch, is L recusare. The s repr. [z], and if Anglo-French has the form russher this is obviously so because sound symbolism has played a part. Thus, there seem to be two elements, OF ruser plus the symbol -ush in obs. sense ‘drive back, force out of position’, and rush = var. of rash. Cp. also final symbol -ush. Rip ‘cut, pull, tear’ etc. 1477 appears to contain the final symbol -ip, but the initial is not clear.

Rollick 1826 is possibly a blend of romp 1709 and frolick 1538. The word racket 1565, orig. ‘disturbance, loud noise, uproar’ etc. is explained by the
OED (s.v. *racket* sb.3) as “prob. onomatopoeic”. As for *rack*-., it might be symbolic, but the -et cannot be accounted for. Derivation from Gaelic *raicid* (which the OED thinks is itself derived from the English word) is more plausible.

7.71. /s/ is an initial with several words expressive of frictional noise, chiefly such as are caused, by the intake of breath or the sipping, dripping or trickling of liquids, as *suck, sigh, soak, sup*, *sop*, *sipe* ‘ooze, drip’ etc. O.E. Later symbol words are *sob* 1200 (prob. a var. of *soap*), *sip* 1386 (another var. of *sop*, or of *sup*, all representing the same “root”), *seep* ‘ooze’ 1790 AE (variant of *sip* with the long vowel expressive of the slow oozing). Hissing noises are expressed in *siss* ‘hiss’ 13.. (now AE and E dial.), *sizz* ‘burn, brand, hiss, sizzle’ 1700, *sizzle* 1603.

*Souse* ‘heavy blow, thump’, as a vb ‘strike’ etc. 1480 may be an echo word, as the OED supposes, but it is not suggestive of English symbols. It has possibly helped in the coining of *sock* ‘beat’ (*souse* plus *knock*) 1700.

7.72. /z/ is an infrequent initial. *Zigzag* 1712 is a loan from French. English coinages are *zip* 1875 (sec. *-ip*), *zoom* ‘make a continuous low-pitched, buzzing sound’ 1886, in aircraft slang also with meaning ‘aircraft’s steep climb’ 1917. ADD quotes *zoom, zune* ‘go or run fast with a hum or buzz’ 1886.

7.73. /ʃ/ has not been very productive. Obs. *shag* (1380—1572) ‘toss about, shake’ and *shog* ‘shake, rock, jolt’ 1388 are variants of *shake* OE, as is prob. also *shock*. In sense ‘move swiftly and suddenly’ the latter is obs. now. The OED quotes it as *shock* v.1 against *shock* v.2 ‘collide’ etc. which is rec. from 1576 and for which the OED assumes F *choquer* as the etymon while it leaves the question of etymology open for *shock* v.1. Both senses are, however, explainable from *shock* var. of *shakes* (though influence of F *choquer* is probable, at the same time). OE *scacan* is somewhat parallel: it meant 1) ‘move quickly, flee’, 2) ‘quiver, quake, tremble’, trans. ‘flourish, braudish, wave’. *Shamble* ‘walk unsteadily’ (17th c.) is prob. *shakes* plus -amble (see -amble). The OED derives the word from *shamble* ‘stool’ via *shamble legs* (1607); but why should the legs of a shamble tremble or be unsteady? Obs. (exc. dial.) *shail* ‘stumble, shamble’ 1400 is possibly *shake, shamble* plus *jail* 1225, *quail* 1300.

The initial is emotionally expressive in the exclamation (sb, vb) *shoo* 1483 (used to frighten or drive away birds or poultry).

7.74. /tʃ/ is obviously emotionally expressive, like its variant /dʒ/. It introduces various words expressing sound—the vocal sounds of small animals, esp. birds, metallic or glass sounds, human sounds, and a few others. The words denoting movement are originally imitative of the accompanying sound. The symbol is not older than ME. The historical basis of the sound is OE palatal [k], as in *cearcian* ‘chirk’, *cirman* ‘chirk’ (? *céowan* ‘chew’), *céo* ‘jackdaw’, now *ough* ‘crow’.

ME and later symbol coinages are *chatter* 1225, its ablaut var. *chitter* 1386, *chat* 1440, *chit-chat* 1710, *chap* ‘crack’ 1325 with ablaut var. *chip* 1330 and *chop* 1362 (chap ‘jaw’ 1555 is prob. the same word, after the sound), *chime* 1340, *chink* 1581 (used of metal or glass), *chirp* 1440 = *chirrup* 1579 = Sc. *chirt* 1386, *chirr* ‘trill like a grass-hopper’ 1639, Sc. *chirr* ‘warble’ 1818, *chuck* ‘cluck’ 1386, *chuckle* 1598, *cheep* 1513 (chiefly Sc., used of birds and mice),
chipper ‘twitter, babble, chatter’ AE 18…, obs. chit ‘name of a bird’ 1610, chiff-chaff ‘name of a bird’ 1780, chink ‘fit of coughing’ 1767, champ (with AE var. chomp, chank) ‘chew’ 1530, chug ‘sound of oil-engine etc. when running slowly’ 1897. Chuck 1533 is a variant of shock (the original form is shock with the /tʃ/ or /θ/). The earliest quoted sense is ‘give a gentle blow under the chin’, chuff (for sound of engine).

7.75. /dʒ/ is the voiced variant of /tʃ/. It is app. emotionally expressive (the initial occurs in Turkish, for instance, with symbol coined words, also in Old French). No coinages occur before about 1300. Jangle 1300 ‘chatter, babble; dispute, wrangle’ appears to represent OF jangler; the symbol -angle is not suggestive of the senses; with meaning ‘jingle harshly’ (1494) the word is, however, a var. of jingle 1300. Then come jabber 1499 ‘gabble’ etc. (the -abber offers some difficulties as the symbol has formed no other words, except the more recent gabber; it is, however, prob. a variant of -able, jowl or joll ‘toll (a bell), bump’ 1520, jumble 1529 (orig. ‘make a rumbling noise’), jum 1511 (originally denoting the accompanying noise; ep. the exclamation for a fall into water in Turkish cump (pron. [dʒump]) ‘plump’, jar ‘make a harsh grating sound’ 1526 (cp. gnar, snar), jug ‘imitation of one of the notes of the nightingale’ 1523 (cp. chuck, chug), gibber or jibber 1604 (ablaut var. of jabber), jam 1706, jazz 1918 (Judah A. Joffe in WORD 3. 105/106 derives the word from F ça jase. Many etymologies have been suggested, but if Joffe is right, the word received the symbol /dʒ/. The French word has [ʒ], a fact which the author seems to have overlooked).

There are a number of words implying jerky movement, as jog ‘pierce, prick’ etc. 1440, also as a sb in several variants of the semantic basis ‘sharp projection’, jog 1548 ‘shake with a jerk’ (cp. shog), its freq. joggle 1513, its ablaut variant jig ‘lively dance’ etc., also as a vb (1560), jiggle 1836 ‘move backwards and forwards’, jigger 1867 ‘make a succession of rapid jerks’, jigget 1687 (infl. by jïget) ‘jig, hop, skip about’, jerk 1530, jînk ‘jerk, quick turn’ 1700 (in second world war used for maneuvering aircraft) job 1490 with var. jab 1825 ‘stab, prod, poke’ etc., jab ‘pull a sail’ 1691. Jounce 1440 is prob. formed with the /dʒ/ of the above sound group and the -ounce of bounce 1225.

Many etymologies have been offered for the word jeer 1553. It may be a blend of fleer 1400 ‘jeer, sneer’ and jest. Jest sb (fr. OF gesse) developed the following senses: ‘feat, tale of a feat, idle tale, jeer’. The vb jest 1526 means ‘jeer’.

7.76. /j/ is a frequent initial with words expressive of vocal sounds, as yell, yelp, yex, yesk ‘sob, hiccup, belch’ OE. Later are yo-ho 1300, yowl 1450, its var. yawl 13... (cry of pain, grief, distress), yawp ‘yelp, cry harshly’ etc. 13... yammer 1481, yap ‘bark sharply’ 1668, yowl ‘bark’ 1682, yaffle (a dial. name of the green woodpecker), yah (excl. of disgust etc.) 1812, yaw-haw ‘guffaw’ 1836, yaw-yaw ‘talk affectedly’ 1854, yoho (excl. to call attention) 1769, yoicks (fox-hunting cry urging on the hounds) 1774, yooop (sound of convulsive sobbing) 1848, you ‘cry of a cat or dog’ 1820, yep ‘a call to urge a horse’ 1690. Yip 1440 in sense ‘cheep as a young bird’ is termed ‘obs. or dial.’ in OED, but the word is alive in AE with meaning ‘yelp’, acc. to OED first rec. 1907. Its variant yipe is not rec. in OED or Spl., but the word is common in AE. Yatter ‘gabble, chatter’ is not recorded before 1866.
Final symbols: rime derivation

7.77. Rime plays a great part in language, as has been observed in connection with the coining of geminated words (see VIII). But its part is obviously more important than has hitherto been recognized. In this chapter I shall deal with rime as having played a part in the derivation of symbolic words. Words may be derived from others as their riming counterparts, distinguished from them by the initial only.

I have arranged the material according to spelling. The alphabetical order makes the reading of it more convenient as there is no established order in the sequence of phonetic symbols. Most of the words listed are also treated under their respective ‘initial symbols’ in a more detailed manner.

7.78. -ab: dab 1300, stab 1375 Sc, 1530 StE, jab 1825 (strike, thrust).

-abble: babble 1230, rabble 14... ‘speak in a rapid, confused manner’, gabble 1577 ‘talk volubly’.


addle: straddle 1555 ‘stride about’ etc., paddle 1530 ‘walk in shallow water’ (obviously a variant of puddle), waddle* 1592.

-aggle: draggle 1513 (see /dr/) attracted daggle 1570 on the analogy of dabble/ drabble.


amble: expressive of unsteady to and fro movement may have originated in the loan amble 1386. Later are obs. famble 14... ‘stammer, stutter’ (var. of jumble), wamble 1420 ‘turn and twist the body about’ (now dial.), scramble 1526, scamble 1539, orig. ‘scramble’ = shamble 1681 ‘walk unsteadily’, ramble 1620 ‘wander, travel’.

-amp: stamp 1200, tramp 1388, champ 1530 ‘chew’.

-ang: pang 1526, bang 1550, twang 1542, tang 1556, clang 1576, spang 1513 (Sc and north. BE ‘spring, leap’, orig. used of the bow or arrow), whang 1684.

-ank: clank 1614, spank 1727, crank 1827 ‘jarring sound’.

-ap: clap, tap 1225, chap 1325, flap 1330, rup 1340, snap 1495, swap* 1350, slap 1632, yap 1668, plap 1846.


-arl: snarl 1589 (-l extension from snar), obs. gnarl ‘snarl’ 1593.

-ash: dash 1290, lash 1330, flash 1387 (orig. chiefly said of water), pash ‘dash, smash’ 1362, crash ‘gnash, dash, smash’ 1400, slash 14... obs. rash ‘dash’ 14... (chiefly Sc), gnash 1496, clash 1500, plash 1513, swash* 1528 ‘fall of a heavy body’, and squash* 1565, gash 1565, quash* 1609 H, bash 1641 (orig. used of a hen, then generally ‘strike with a heavy blow’), splash 1715, smash 1778.


-eer: *fleer 1400 ‘jibe, jeer, sneer’ (prob. a Scand. word, cp. dial. *fleer ‘grin’ (see OED *fleer v.), *sneer (see initial /sn/) 1553, *jeer 1553 (see initial dź).

-eeze: *sneeze 1499 (see initial /sn/), *weeze 1460.


-iddle: is found in several words denoting ‘trifle’ of which the basis may be *fiddle which in this particular sense development is first recorded 1530. Other words coined after it are *piddle 1545, *tiddle 1560, *twiddle 1540, *quiddle 1567, *diddle ‘sing without distinct utterance of words’ 1706, *diddle (away) ‘trifle (away), waste’ 1826.


-iggle: the symbol is found with words expressive of small, continuous movements or sounds, as *wiggle ‘wobble, waggle, wriggle’ 1225, *wriggle 1495 = *squiggle 1804 = *scriggle 1806, *sniggle ‘snicker’ 1815.


-irr: *whirr 1400, *skirr 1548 ‘move hastily, make a whirring sound’, *chirr 1639 ‘trill like a grasshopper’, *squurr 1710 ‘cast with a whirling motion’. All express quick movement or whirring sound.
-isk: whisk 1480, frisk 1519 (the initial perh. from freak which is not recorded before 1563 but may be older; cf. OE frician ‘dance’), dial. flisk 1596 ‘caper, frisk’.
-iss: siss 13..., kiss 1388.
-it: spit OE, sit 1205, fit 1200, hit 1450, skit 1611 (quick movement). Cp. also F vite (the earliest recorded form viste is a different sound-symbolic ‘root’). The symbol /yt/ or /üt/ is used in Bavaria, Denmark and Sweden to denote great quickness of movement or disappearance.

-itch: twitch OE attracted hitch 1440, pitch 1205, all suggestive of jerky movement.

-iver: quiver 1490 joined shiver 1200 (orig. chiver, of unexplained etymology, the [ʃ] is 15th c., prob. after shake), the underlying idea being that of ‘tremble, shake’. It is possible that flivver 1912 is a blend of -iver and flunk, the original meaning of the word is ‘fail, bungle’. The sense ‘cheap, shaking motorcar’ also fits in semantically.

-izz: whizz 1547, fizz 1665, sizz 1700, frizz 1835 denote similar noises. The root of blizzard 1829 may be the same symbol plus the initial /bl/ of the ‘blow’ class.

-izzle: expresses continuous quietly sputtering noises, as of rain or fat in a pan: mizzle 1483 (the m from mist perh.) and drizzle 1543 (see initial /dr/) denote light, continuous rain (see OED s.v. mizzle v.1 with a few LG and Du. exs to which may be added LG fesseln (pron. [z]). The noise of sputtering fat is expressed in sizzle 1603, frizzle 1839, fizzle 1859 H.

7.80. -oan: groan OE seems to have attracted moan which is recorded as a sb 1225. The verb is recorded much later (15th or 16th c.). The OE vb ménan ‘moan’ developed the deverbal sb mene, recorded 12...; last quoted in OED in a 19th c. text. The deverbal sb groan is not recorded before 1300 (as groan, gron), chiefly in cb give a groan. Moan sb is also chiefly found in phrase make (one’s) moan, beside which the phrase mean (one’s) moan is frequent in the 14th c. The drawback of my explanation is that moan is older (1225) than groan (1300); but perhaps this is merely due to an incidental gap in the existing material.

-ob: sob 1200 (perh. a variant of sop) attracted throb 1362.

-od: seems to be imitative of sound, underlying pod 1562, prod 1535 (with the initial of the ‘prick’ class), dial. dod ‘beat’ 1661, pod ‘prod, poke’ (now dial.) 1530.

-odge: is perh. a variant of older -udge, conveying the idea of heaviness, stuffedness: podge 1638 ‘walk heavily and slowly’ (see -od), stodge 1674 ‘gorge, stuff’ (see initial /st/), podge 1833 ‘short, thick and fat p. or animal’, also used for things, its derivative podgy 1846.

-oll: sound words are knoll 1379 ‘sound of a bell’, toll 1452, jowl, joll 1520 ‘toll (a bell), bump (the head)’. Expressive symbolism underlies loll (as Ekwall, English Studies 28, 108 shows, the word must have existed before 1100), troll 1377 (see initial /tr/; usually derived fr. OF troller, see OED

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1 Cf. O. Jespersen, Lehrbuch der Phonetik³, 89.
22 Marchand, The categories
troll v.), its variant stroll 1603 (see initial /str/). The word roll 1375 is, however, OF rolir (which passed into German also).

-omp: seems to occur only as a variant of -amp as I see it in the American word stomp ‘beat down forcibly’, as with the foot (see ASp 30. 287, 1955).

-onk: has formed the words honk 1843, cronk ‘cry of the wild goose’ 1878, perhaps also conk ‘break down, give out, fail’ 1918. The first examples recorded in OED refer to the dying of an airplane motor (my engine began to conk a bit).

-oom: boom (in this form 18th c.) ‘buzz, make a deep, resonant sound’ etc., zoom 1892 ‘make a low-pitched buzzing sound’. In aircraft slang zoom denotes the sudden steep climbing of the plane (first rec. 1917). Boom in sense ‘boom of business’ (1879 U.S.) is prob. the same word, the noise of booming was perh. connected with the noise of production machinery as the outward sign of the ‘boom’, just as the doubled activity and consequently doubled noise of the engine is indicative of the sudden climb of the plane.

-oop: whoop 1400, roop ‘hoarse sound’ 1674, scroop 1787 ‘creak, grate’, cloop 1848 ‘noise of a cork’.

-op: pop 1386, whop 1400 ‘cast, strike’ (prob. fr. the sound), flop 1602, plop 1833.

-ore: biore 1440 ‘a violent blowing’, snore 1330 ‘a snort’.

-ouch: couch 1330 which is F coucher, attracted crouch 1394 and slouch (see initials /kr/ and /sl/).

-ough: cough 1325 = obs. rough 13...

-ounce: sound-imitative is bounce 1225 (in form bunsen; cp. bum, boom, OE gynian ‘pound’, G bums etc.) which seems to have attracted jounce 1440.

-owl: growl (Wycl.), howl 1450, yowl 1450.

7. 81. -udder: shudder 1310 (from the Germanic root skud) attracted dudder 1658 ‘shudder, shiver’ (ablaut variant of didder).

-udder: the final occurs in several words which defy etymological explanation, as cuddle, fuddle, huddle, muddle, so we cannot say whether the words are symbol-coined. But fuddle 1588 ‘confuse with drink’ seems to be responsible for the sense development of muddle ‘wallow in mud’ to ‘stupefy with liquor’ 1687 H.

-udge: the starting-point of the symbol seems to be grudge 1450 ‘murmur, grumble, be reluctant, envy’ which is the variant of now obsolete grutch 1225 (= OF grontier, groncher, which is likewise onomatopoeic). Somewhat later recorded is the word drudge (1494 as a sb, 1548 as a vb) which may be a blend of the symbol and dre ‘labor’ (OE dréogan). Trudge 1547 is the symbol with the initial /tr/. The symbol is obviously emotionally expressive of heaviness, unpleasantness or the like. Though grudge is not recorded before 1450, it may be older, which would account for smudge ‘soil, smirch’ 1450 as the symbol extension of smut (which in form smot is recorded as far back as 1387). Smudge 1545 ‘miser, niggard’ may be from snap, snatch (money) plus the symbol. Sludge 1649 may be the symbol extension of stub 1577, slush 1641 (see initial /sl/). There are, however, other words in -udge which do not appear to belong in the group (as nudge
'push with the elbow', *fudge* 'fadge, fit in' etc., *smudge* 1633 'remain snug and quiet'). A variant of -uffe is app. -dge with a similar emotional value (see -dge). Words in -dge are newer which would point to the influence of the symbol -dge. *Pudge* 1808 is a by-form of *podge* 1833 'short and thick p. or thing'.

-uffe: is an onomatopoeic variant of -iff and symbolic of an outburst of breath, air or smoke: *guff* 1225 (perh. the var. of OE *pyffan*), *buff* 'burst into a laugh' etc. 1297 (obs. exc. dial.), *huff* 'puff, swell' etc. 1583, *smuff* 1527 (the OED supposes Du origin), *whuff* 1896 'puff' = Sc *fluff* 1818 = Sc *juff* 1513 = Sc *pluff* 1663, *guff* 'puff, whiff' 1825, *chuff* (denoting the noise of an engine or machine) 1921.

The sb *buff* 'blow, stroke' 1420 is obviously onomatopoeic for the sound accompanying the blow (either the sound of breath or more probably the wind-like sound of the blow), as in G *guff* 'blow'. The sb *blow* 1460 shows as similar development. Though the OED rejects the etymology, the word is certainly the same as the vb *blow* (of wind). That the sb *blow* 'blast' is recorded later is no serious argument. The analogy of F *soufflet* (fr. *souffler* 'blow') is an exact parallel. That *soufflet* is first rec. in sense 'instrument for blowing' (see Bloch s.v. *souffler*) does not prove the proposed etymology wrong. No one will derive one sense from the other, but both meanings have separately sprung from the idea 'souffler-blow'. A rime-variant of *buff* is *cuiff* 'strike' 1530 (with the initial of *kick*).

*Bluff* 1674, orig. recorded as a vb with the meaning 'blindfold', seems to belong here. It is possibly a variant of *buff* (a name given to the blindfolded player in the game of 'blind man's buff'), rec. 1647, with the bl-of *blind*, *blindfold*. The original sense would then be 'make a blindfolded buff of a p.'.

-uffle: the etymology of *ruffle* 1300 'crumple' etc. is not clear. With the underlying idea of 'untidyness, disorderliness' it may have coined *shuffle* 1532, orig. 'put together in a hasty, disorderly manner' (as a blend with *shove*), of which *scuffe* 1579 in same sense in the /sk/ variant (see initial /sk/). The sb *scuffle* 'scrambling fight' 1606 is a semantic variant of the basis.

-ug: is a symbol with words denoting pulling movements. *Tug* 1225 (first with the spelling *togen*, since 1300 *tug* is prob. a variant of *tuck* 'tug, pull' (sense now obs.), recorded with this meaning since about 1300; the latter is the short vowel variant of OE *tucian* 'ill-treat' etc. (i.e. the basis taken in an abstract sense). *Shrug* 1400, orig. meaning 'shudder, shiver' has the initial of *shrink*; *rug* 1300 'pull forcibly' is the north. BE and Sc variant of the symbol with the initial of *rock*, OE *rocian*. *Hug* 1567 is the symbol plus the initial /h/ of exclamations (see initial /h/).

*Lug* 13... 'drag, pull' seems to belong here, but I cannot account for the initial [l] (the OED supposes Scand. origin, but there is no old Scand. word to support the etymology). *Chug* 1897, denoting the sound of an oil-engine etc. when running slowly, is a var. of *chuck* but at the same time suggests the jerky movement of the motor.

-umble: is symbolic of indistinct humming or rumbling noises, as in mumble 1362, rumble 1384, obs. humble ‘hum’ 1384, jumble 1529, orig. ‘grumble’, obs. drumble ‘mumble’ (1579—1596), grumble 1586 (see initial /gr/).  
Tumble 1300 is the freq. of OED tumbian ‘tumble, make somersaults’. With the basis of ‘tumbling movement’ it attracted stumble 1325 (see initial /st/; the OED supposes Scand. origin), fumble 1508 (see initial /f/).  
-ump: is expressive of heavy fall and impact in dump 1300 ‘fall heavily’, plump 13—., jumpl 1511, thump 1537, bump 1566, crump 1646 ‘noise of horses or pigs when eating’, clump 1665 ‘tread heavily’, slump 1677, flump 1790, wump 1897 ‘throb; sound of fall’.  
It is emotionally expressive (of displeasure) in lump 1577 ‘be displeased’ = mump 1586, hump 1673 ‘ill-humor’, frump ‘cross, old-fashioned woman’ etc. 1817 as a vb in sense ‘put in a bad humor’ 1862, in obs. sense ‘sulk’ 1693), lump 1577 ‘look sulky’ (with the /l/ of lower, lower; in early quotations lump and lower form a set group), drump ‘sulk’ 1875 = dial. glump 1746 (with the initials of grant resp. gloom, gloom; glumpy 1730 is StE). In plural form are used frumps ‘sulks’, obs. humps and grumps ‘slights and snubs’.  
-unch: is imitative of sound in munch 1374 (see initial /m/) and crunch 1801 (see /k/). There are many concrete sbs with the basic meaning ‘hump’ matched by counterparts in -ump (bunch, hunch, lunch, clunch / bump, hump, lump, clump); I do not deny their symbolism, but I would refer the reader to my remark above (7.5.)  
-unk: obs. funk ‘spark’ 1330 attracted spunk 1536 (with the initial of spark) ‘spark’, also ‘tinder, touchwood’ of which punk 1707 is the s-less variant.  
Funk ‘flinch’ c 1740 is unexplained (first quoted as Oxford slang), but flunk 1823 is a blend of it and the symbol /fl/.  
-url: is symbolic of prolonged vibrating, dull sounds (cp. hurr ‘make a dull vibrating sound’ 1398 and /l/ (7.12). It has coined hurl 1300 and purl 1586.  
-urry: the first recorded word of this group is hurry c 1590. The basis is obviously -urr as in hurr, the buzzing noise standing for the idea of agitated activity. I cannot, however, explain the -y. The word attracted the gemination hurry-scurry 1732 from which scurry separated as an independent word (first inst. 1810) and flurry 1698.  
-urt: spurt 1570 is spit plus the vibrational -urr (as spirt 1582 is the simple r- variant of spit), followed by blurt 1573 (see /bl/). Today, -urt and -irt are graphic variants of the same symbol.  
-ush: is a variant of -ash; it has formed flush 1300, obs. lush ‘dash, strike’ 1330, obs. dash ‘dash’ 14th c., rush 1375 (the word is generally considered to be AF ruser, var. of russeur), gush 1400. Obs. frush 13—. ‘strike violently’ is prob. OF fraissier. The initial /fr/ in English does not form words of this class, but crush 1398 is the symbol plus initial /kr/ (the OED derives it from OF croissir which has, however, the meaning ‘gnash the teeth’).  
Blush 1325, orig. ‘look’ does not appear to belong here. The symbol is emotionally expressive in tush 1440, an exclamation of impatience. Push fr. OF pousser may have been influenced by the symbol, the [s] is otherwise difficult to account for.
-ustle: is originally imitative of sound, the -le symbolizing continuation, as in *rustle* 1389. The sense ‘move rapidly’ is first rec. 1586 in OED, and *bustle* c 1560 is perh. a var. of obs. *busk* 1545 (fr. *busk* 1300) after it. *Hustle* 1684 is perh. *hurry* plus the symbol (the OED derives it from Du *husselen, hutselen* ‘shake, toss’). In recent AE the words are all synonymous.

-uuzz: imitative of sound it has formed *buzz* 1398 = *huzz* 1555 = obs. *fuzz* 1676. In a semantic variant it underlies *fuss* in obs. sense ‘make drunk’ (so that the head buzzes), in another *fuzz-ball* 1597 (the accompanying motion being predominant). Its frequentative is *fuzzle* ‘intoxicate’ 1621 which is obs. in BE but is recorded in AE with the variant *wuzzle* (see ADD s.v. *fuzzle*).

Word-coining through ablaut modification

7. 82. The derivative principle here is sound symbolism as expressed by the root vowel. As many words are cross related, a good many will be found to have been mentioned in the chapter ‘Initial Symbols’. Others have been treated under ‘Final Symbols’ as they enter the group of a final symbol at the same time (e.g. *tang* as a variant of *ting*, but also joining other words with the final symbol -ang).

The most frequent ablaut pattern is /a - u/, corresponding to older /i - a/. Next comes /i - o/. But there are also other types as our examples show. Which word of the ablauting group is presumably original can usually be told from OED, but it should be noted that earlier or later occurrence of one or the other vowel is incidental to the derivative process (*tip* is more recent than *tap*, but *flicker* is older than *flacker*). Some roots have more than two ablaut variants.


/ι - e/ *clinch* 1570 / *clench* 1250, *glint* 1440 / *glent* 13... *pick* OE / *peck* 1382.

/ι - o/ historically speaking, we have the alternation in *sniffle* 1631 / *snuffle* 1583, *spirit* 1582 / *spurt* 1570, *spurtle* 1603 / *spurtele* 1633, *tick* 1440 / *tuck* 13... (now dial., chiefly Sc, ‘beat the drum’; see 7.29; OED derives it from ONF *toquer*).

/A - a/, corresponding to earlier /u - a/: *cluck* 1481 / *clack* 1250, *dush* 13... *dash* 1290, *flutter* OE / obs. *flatter* 1375, obs. *lush* 1330 = *lash* 1330, *ruttle* (now dial.) 1400 = *rattle* OE, *sputter* 1598 / *spatter* 1582 (the former has auditory, the latter rather visual connotation), *splutter* 1677 / *splatter* 1784. Cf. also *bluster* 1434 and *blast* 1300. The verb *paddle* 1530 is obviously
VII. Phonetic Symbolism

a variant of *puddle* 1440, while *rugged* 1330 seems to belong to *ragged* 1300.


/ʌ - n/ occurs in *tush* / *tosh* (exclamation), *pudge* / *podge* ‘short and thick person’, *putter* / *potter*.

Quantitative differences of vowel underlie *crack* OE / *crake* 1386, *scrutch* 1250 / *screech* 1560, *titter* 1400 / *teeter* 1846, *sip* 1386 / *seep* 1790, while *twick* ‘twitch’ OE / *tweak* 1609 belong here only synchronically. A similar quantitative-qualitative opposition relates *quiver* 1490 to *quaver* 1440.


Phonic variation of the root implies the changes in content outlined above (7. 8.—10. and 16.—17.). Cf. *chitter* and *chatter*, *clap* and *clap*, *tip* and *tap*, *drip* and *drop*, *hip* and *hop*, *jig* and *jog*, *sip* and *sop*, *tip* and *top*, *tit* and *tot*.

However, not all of the words exist on the same synchronic plane, as the list shows. Some are obsolete. A few are dialect variants of StE forms with a vowel of slightly different acoustic qualities (cf. *putter* / *potter*, *champ* / *chomp*, *stamp* / *stomp*). Others seem to have had restricted currency anyway (as *clitter*, *dib*, *flack*, *flacker*, *higgle*, *jibber* a.o.). But in general, the expressive principle itself does not seem to be bound up with certain periods as are other phonemic or morphological patterns, so I have thought it legitimate to group ablaut variants together.

Word coining through prothetic s

7. 83. We have already referred to the modification of roots by means of a prothetic *s*. We give here some more examples: *scrag* 1567 which the OED cannot explain is obviously a variant of *crag* 1300; *scratch* 1474 is a variant of obs. *cratch* 1320; obs. *scrawl* ‘sprawl’ 1380 is a variant of *crawl* 1300; *scrunch* 1825 is a variant of *crunch* 1801; obs. *scringe* 1608 is the variant of *cringe* OE. The Sc word *slump* 1718 for which the OED assumes a LG etymon is nothing but the variant of *lump* 1300; dial. *squench* 1535 is the variant of *quench* 1200; *squash* 1565 is the variant of *quash* 1387; obs. *squeasy* 1583 is the variant of *queasy* ‘squeamish’ 1459; *squelch* 1620 is the variant of *quetch* 1659; *snick* ‘snip, nick’ 1700 is the variant of *nick* 1523 (infl. by *snip*); *snip* 1586 is the variant of *nip* 1393 (or a variant of *snap*); *spree* 1866 is an American and English dial. variant of *peer* 1591 (perh. influenced by *spy*).

There is no denotative semantic difference between the variants; the prothetic *s* seems to be merely playful. At any rate, the opposition *s* ~ *zero* has no derivative value synchronically.
Variation through voicing resp. unvoicing of the consonant(s)

7.84. We find many pairs of words that are differentiated formally by the opposition ‘absence of voice ~ presence of voice’. But the opposition is not a derivative principle. A very few words are used synonymously, while others, marked as such (at least in part), are not synonymous for one and the same speaker. Snicker 1694 and snigger 1706 are pretty synonymous, so are smutch 1530 and smudge 1430. The difference is often one of dialect only or of earlier and later usage (if this historical difference was not also one of dialectal variation, which it is impossible to tell). Hack 1200 is matched by Sc hag 1400, sludge 1649 by dial. slutch ‘mud, mire’ 1669, toss 1506 has a dialect variant dose 1583. The Old English word scringan ‘shrink’ is also represented by the form scrincan, tuck 13.. and tug 1225 are often used interchangeably in early documents, according to OED, and sprinkle 1502 is now rare or archaic for sprinkle 1400. Original grutch 1225 changed into grudge 1450. But the partial synonymousness which dictionaries give for some pairs will not be felt by one and the same speaker: grizzle 1579 is hardly used for grapple 1530, nor is sniffle 1819 interchangeable with snivel 1400 (as in snivelling coward), and totter 1200 is the common word while dodder 1617 is hardly known except in such expressions as a doddering fool. Haggle 1583 is commonly used with the meaning ‘bargain’ and is different from hackle ‘hack, cut roughly, mangle’ 1579.

The semantic differences between sop and sob, tap and dab, pat and bat also show that, though the sound value of voiced and voiceless consonants is made use of in the coining of expressive words, the opposition ‘absence of voice ~ presence of voice’ has no derivative relevancy, i.e. no grammatical standing (cp. 7.9)^1.

^1 My manuscript had long been completed when I read H. Wissemann, Untersuchungen zur Onomatopoeie. The book covers similar ground insofar as it investigates, by way of experiment, the general problems of the coining of onomatopoeic words. It deals only with what I have called ‘direct imitation’ (Schallnachahmung). As for the value of speech sounds and several general principles, Wissemann has arrived at results similar to my own, while in other respects (for instance the treatment of initial symbols) our interpretations differ. See my review of the book in Indogermanische Forschungen 64 (1959) 183—187.
VIII. MOTIVATION BY LINGUISTIC FORM:
ABLaut AND RIME COMBINATIONS

8. 1. Ablaut and rime gemination are based on the principle of coining words in a phonically variated rhythmic twin form. As I hope to show later, such combinations are essentially pseudo-compounds, motivated by the significant, whether they are made up of two real morphemes (as *singsong* / *walkietalkie*), of only one sign (as *chitchat* / *popsy-wopsy*), or whether they are entirely unmotivated by semantic content (as *flimflam* / *boogie-woogie*). They are not therefore compounds comparable to such types as *rainbow* or *colorblind*, which are grammatical syntagmas based on a determinant / determinatum relationship. An extensive collection of these twin forms, based on OED, has been made by Eckhardt\(^1\), nonce-words used by various writers are to be found in Jespersen\(^2\). In my lists, I have given only the most commonly known words (though in other places I have also used rare or obsolete combinations for the purpose of demonstrating certain points of linguistic interest), adding recent Americanisms which have not been mentioned in former studies. Not all of them have general currency, however\(^3\). Besides this, my chief interest has been to raise the question of the linguistic relevancy of twin words and to discuss their status in word-formation, a problem which has so far been neglected. These formations are regularly omitted in older grammars, while recent handbooks\(^4\) include them without, however, noticing or mentioning their particular linguistic status. But before going into this I shall give a description of both types.

Ablaut combinations

8. 2. 1. Ablaut combinations are twin forms consisting of one basic morpheme, sometimes a pseudo-morpheme, which is repeated with a different vowel in the other constituent. Types *chitchat* and *singsong* illustrate the most frequent forms of ablaut gemination, i.e. twin words with the vowel alternation [i - a] and [i - o]. The former corresponds to earlier [i - a] which is a well known form of apophony in Indo-European languages. The great majority of ablaut combinations belong to this type.

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\(^1\) E. Eckhardt, Reim und Stabreim im Dienste der neuenglischen Wortbildung. Englische Studien 72 (1937/38) 161—191.


\(^3\) I have compiled my material from the Dictionary of Americanisms and from articles in American Speech as far as Americanisms are concerned.

VII. Ablaut And Rime Combinations

8.2.2.

*bibble-babble* ‘idle talk’ 1532

*chitchat* ‘gossip, small talk’ 1710

*click-clack* ‘the sound of clicking and clacking’ 1782

*clink-clank* ‘jingle of words’ etc. 1679

*clitter-clatter* ‘tittle-tattle, chatter’ 1535

*dilly-dally* ‘loiter, trifle, waste time’ 1610

*dingle-dangle* ‘dangle’ 1598

*drizzle-dazzle* ‘continuous drizzling rain’ 1855

*fiddle-faddle* ‘trifle, gossip, fuss’ 1577

*flimfiam* ‘idle talk, rubbish, deception’ 1538

*gibble-gabble* ‘gabble, senseless chatter’ 1600

*higgle-haggle* ‘haggle’ 1841

*jimjams* ‘delirium tremens’ etc. vg AE, orig. sg = ‘knick-knack’ 1550

*jingle-jangle* ‘alternation of jingling sounds’ etc. 1740

*kit-cat* ‘the game of tipcat’, now dial., 1664

*knick-knack* ‘small article of ornament, gimcrack’ 1618

*mingle-mangle* ‘confused medley’ 1549

*mishmash* ‘medley, confused mixture’ 1450

*pitpat* ‘small noise’ 1522

*prittle-prattle* ‘idle talk, silly chatter’ 1556

*rickety-rackety* ‘unsteady’ 1595

*rickrack* ‘kind of serpentine braid’ 1884

*shilly-shally* ‘hesitate, be evasive’ 1700

*skimble-skamble* ‘confused; worthless discourse’ etc. 1596

*slipslap* ‘slap repeatedly’ 1890

*snipsnap* ‘clever, quick repartee’ etc. 1593

*ticktock* (said of a clock) 1549

*tittle-tattle* ‘idle talk gossip’ etc. 1529

*whimwham* ‘trifle, fanciful object’ 1529

*wigwag* ‘move lightly to and fro’ 1582; signal with a flag 1846

*zigzag* ‘series of sharp turns or angles’ etc. 1712.

8.2.3.

*clipclop* (said of the sound of hoofs etc.) 1863

*crisscross* ‘mark with cross lines’ etc. 1846

*dingdong* (said of the sound of a bell etc.) 1560

*dripdrop* ‘drip and drop, drop slowly’ etc. 1848

*flipflop* ‘sound of a footfall; somersault’ 1661

*pingpong* ‘table tennis’ 1900

*singsong* ‘monotonous voice’ etc. 1609

*slipslop* ‘weak liquor; twaddle’ etc. 1675

*ticktock* (said of the noise of a clock in American English) 1848

*tiptop* ‘first class, the very best’ etc. 1702

*wibble-wobble* ‘move unsteadily’ etc. 1847
wishwash ‘weak, thin drink; twaddle’ etc. 1786, also in similar senses wishy-washy 1693 (which as an adjective means ‘unsteady, not dependable’).

8. 2. 4. No other productive forms of apophony have developed. A combination such as shiffle-shuffle, a sb for which OED quotes one example (1871), is isolated. I have not treated seesaw and gewgaw as ablaut combinations partly because they are unanalysable and partly because they are isolated in pattern.

8. 2. 5. The member containing the higher vowel always precedes the one that has the lower vowel. This phonic tendency is widespread. The reasons are probably physiological as well as psychological: the smaller distance between tongue and palate for high vowels becomes greater with low vowels in a natural rise from the smaller to the bigger¹. The psychological value of the opposition is therefore quite logically that between high and low, with the rise preceding the fall.

8. 2. 6. The symbolism underlying ablaut variation is that of polarity which may assume various semantic aspects. Words denoting sounds form a large group, the vowel alternation symbolizing the bipolar range of sound possibilities: click-clack, clink-clank, clip-clop, clatter-clatter, ding-dong, jingle-jangle, pitpat, pitter-patter, skip-slap, snap-snap, tick-tack, tick-tock. With words expressive of movement the idea of polarity suggests to and fro rhythm: crinkle-crankle ‘zigzag’, criss-cross, flip-flap, flip-flop, dingle-dangle, nid-nod, wibble-wobble, wigwag, zigzag. Related to this group are words for games, as wiggle-waggle, kit-cat, pingpong, all in a way characterized by two-phase movement. Another aspect of ‘to and fro movement’ is the idea of hesitation, as we have it in shilly-shally, dilly-dally, wiggle-waggle, bingle-bangle (dialect). The same basic concept may lead to the variant of ambivalence, double-faced character, implying the dubious or spurious value of the referent. Flimflam, jimjam, trimtrum, whimwham all have the original meaning of ‘trash, trifle’; the word knick-knack also belongs here. Many words have the basic meaning ‘idle talk’, as bibble-babble, chitchat, fiddle-faddle, prittle-prattle, ribble-rabble (from obs. rabble ‘gabble’), slipslop, tittle-tattle. Cp. also the adjective skibble-scamble, applied to rambling talk. In various ways depreciative (on the basis of ‘ambivalence’) are nominal combinations such as mishmash, mingle-mangle, slipslop (of food or liquor, also as adj ‘shoddy’), wish(y)-wash(y), singsong, rifraff.

8. 2. 7. More than half of the combinations have the second element for a basis: bibble-babble, chitchat, clatter-clatter, crisscross, dilly-dally, dingle-dangle, gibble-gobble, higgle-haggle (the word higgle does actually exist, but it is not in general use), knick-knack (historically from now obsolete knack ‘pretty artifice, trinket’), kitcat, mishmash, pitpat, pitter-patter, prittle-prattle, riprap, shilly-shally (from shall I?), slipslap, slipslop, tittle-tattle, skibble-scamble (from now dial. scramble ‘scramble’), wibble-wobble, wigwag, wishwash.

The number of variations based on the first elements is much smaller: drizzle-dazzle, mingle-mangle (historically derived from mingle, the word

¹ Cp. the opposite tendency in Turkish, however. See my article Alliteration, Ablaut und Reim in den türkischen Zwillingsformen. Oriens 5 (1952) 60—69.
would today appear motivated by both elements, at least to many speakers),
tick-tack, tick-lock, rickety-rackety (I have considered the onomatopoeic words
clip-clopr, dingdong, ping-pong as consisting of two expressive elements, though
actually the sound words clip, ding, ping are recorded earlier than the twin words).
Motivated by both elements (but see below 8. 5) are click-clack, clink-clank,
clip-clop, ding-dong, ping-pong, jingle-jangle, snap-snap, flip-flop, drip-drop,
triddle-taddle, songsong, tiptop.

Entirely unmotivated are the ‘trifle’ words flimflam, jimjam, trim-tram,
whim-wham (whim 1641 is more recent than whim-wham 1529, flam ‘trick’ 1625
is later than flimflam 1538), and two loans from French, rifraff and zigzag.

Rime combinations

8. 3. 1. Rime combinations are twin forms consisting of two elements (most
often two pseudo-morphemes, i.e. fanciful, meaningless sound clusters) which
are joined to rime. Rime is obviously the basic factor in these combinations,
and to speak of ‘repetition with change of initial consonants’ (Jespersen and
Koziol) is to miss the point. Admittedly the choice of the initial consonants
is not arbitrary, but the characteristic mark of this type of twin words is that
they rime.

8. 3. 2.
boogie-woogie ‘a certain style of playing blues’ recent American English
clap-trap ‘nonsensical talk’ etc. 1731
even Stephen ‘exactly even, without any advantage to either side’ 1866 DA
flibberty-gibberty ‘frivolous, flighty’ 1879
flub-dub ‘useless talk, bunk’, also ‘sloppy, error’ 1888 DA
fuddy-duddy ‘foolish, fussy, ineffective person’ 1904 American Speech 16. 229
    (1941)
fuzzy-wuzzy ‘nickname for a Soudanese warrior’ 1892
handy-dandy ‘a children’s game’ 1362; also in obsolescent meaning ‘fine’
hanky-panky ‘jugglery, trickery’ etc. 1841
harum-scarum ‘reckless, careless, disorganized’ 1691
heebe-jeebies ‘the blues; the state of being terrible scared’ 1926
helter-skelter ‘disorderly, pell-mell’ etc. 1539
higgledy-piggledy ‘confusion’ etc. 1598
ho-nob ‘to drink together’ etc. 1713
hocus-pocus ‘jugglery, trickery’ 1624, also in form
hokey-pokey
hodge-podge ‘stew of various ingredients, medley’ etc. 1426
hotty-toity ‘patronizing, snobbish, pretentious’ etc. 1668
holus-bolus ‘all in a lump’ 1838 American Speech 27. 18 (1952)
hootchie-cootchie ‘burlesque or indecent dance’ 1899 DA
hot-sy-tot-sy ‘fine’ recent American English
hubble-bubble ‘narghile’ 1634
hugger-mugger ‘secrecy, muddle’ etc. 1529
humdrum ‘bore’ etc. 1553
hurdy-gurdy ‘kind of barrel organ’ 1749
[8.3.1.—8.3.3.] Rime combinations

hurly-burly 'tumult, confusion' etc. 1539
hurry-scurry 'great hurry' 1732
hy-spy 'a boys' game' (in U.S. usually I spy) 1777
killer-diller the substantive equivalent of super-duper, common American
English, though not in dictionaries
loco-foco 'in U.S. a member of the Equal Rights Party, later Democrats in
general' 1835 DA
lovey-dovey 'sweetheart' etc. 1819
mumbo-jumbo 'fetish; deliberate mystification' 1738
namby-pamby 'weakly sentimental in style, affected' 1726
peepee-creepie 'a portable television camera' 1952 American Speech 28. 208
and 211 (1953), also called creepie-peepee
popsy-wopsy 'little girl; father' 1887
pokemoke 'a swindle' (prob. infl. by hokey-pokey) 1862 DA
pow-wow 'a noisy assembly', orig. 'sorcerer, council of the North-American
Indians' 1624
ragtag 'the rabble' 1820
raggle-taggle adj = ragtag, Shorter OED and Webster, no date. There is an
American song "The raggle-taggle gypsy"
ram-jam 'crammed full' 1879
razzle-dazzle 'riotous intoxication, jollity' etc., 'fine' (said of a football player)
1889 DA
roly-poly 'kind of pudding; short and pudgy' 1601
rowdy-dowdy 'rowdyish' 1854
rumble-tumble 'bad cart or carriage; sloppy' 1801
sacky-dacky (in American army slang of World War II = 'one who suffers
from spiritual depressions and complexes' American Speech 21. 238 (1946)
super-duper 'excellent' recent American slang
slang-whang 'nonsense, abusive talk' 1834 DA
tagrag 'the rabble' (now only in tag, rag, and bobtail) 1583
teeny-weeny 'tiny, very small' 1894
titbit 'a choice morsel' 1640
tootsie-wootsies 'feet', the singular also 'sweetheart' 1854
walkie-talkie 'kind of micro radio phone' 1940 American Speech 21. 115 (1946)
willie-nilly 'without choice, compulsorily' 1608.

8.3.3. Variations on the first element are even Stephen, fuzzy-wuzzy, handy-
dandy (in the original meaning 'children's game' the play is on hand, but in recent
meaning 'fine' the basis is dandy), hotsy-totsy (hot?), hurry-scurry
(scurry is much later), hurly-burly (from hurl; hurly 'turbmoil 1596 is later
than the twin word which is recorded 1539), popsy-wopsy (only in meaning
'father'), roly-poly, rowdy-dowdy, super-duper.

The basis is or underlies the second element in fuddy-duddy (dud 'ineffective
person'), harum-scarum, heller-shelter (historically derived from obs. skelt
'hasten' 13...), higgledy-piggledy (play on pig), hubble-bubble, hi-spy, teeny-
weeny (play on wee), titbit (not from tid adj, as OED explains it, as tid is much
later), tagrag (for tag 'rabble' OED has only one instance from Shakespeare,
but gta is obviously derived from the twin word).
Motivated by both elements are (see, however, below 8.3.5) claptrap, flubdub (flub 'blunder', dub 'blundering player'), humdrum, lovey-dovey, peepie-creepie, walkie-talkie, ragtag, ramjam, rumble-tumble, slangwhang, willy-nilly.

About 40% of all twin words are entirely unmotivated by linguistic signs: boogie-woogie, fibberty-gibberty, hanky-panky, heebie-jeebies, hobnob, hocus-pocus, hodge-podge, hoity-toity, holus-bolus, hootchie-kootchie, hugger-mugger, hurdy-gurdy, loco-foco, mumbo-jumbo, namby-pamby, pokemoke, pouwouw, razzle-dazzle (in a razzle-dazzle football player the combination is motivated by dazzle), sacky-dacky, tootsie-wootsie (with meaning 'feet', the first element is a play on toes, there is no motivation for the word meaning 'sweetheart').

8.3.4. The emotional, unintellectual character of rime gemination is illustrated by the fact that the underlying themes are often playfully extended (the endearing suffixes -y and -ie as well as the playful suffix -dy, -ty play a great role). Unanalysable phrases, often of foreign origin, are made into rime jingles: hodgepodge is OF hocchet, pouwouw is adapted from an Algonquin word. They appear as mock-Latin in holus bolus, hocus-pocus, harum-scarum.

8.3.5. As with ablaut combinations, we distinguish certain semantic groups. Rime, the magic fitting together of words, naturally lends itself to being used in the sphere of jugglery, sorcery or the like, which accounts for such words as hocus-pocus, hokey-pokey, pokemoke, handy-dandy, hanky-panky (prob. a blend of hokey-pokey and handy-dandy), mumbo-jumbo. Many words connote the idea 'disorder, confusion, tumult' or the like, as hugger-mugger (in sense 'muddle, disorderly'), higgledy-piggledy, hurry-burry, hurry-scurry, helter-skelter, razzle-dazzle, hodgepodge. As rime combinations are essentially non-serious, they may convey derogatory, contemptuous or ridiculing shades of meaning when used without the intention of being playful. Names for persons are derogatory: fuddy-duddy, loco-foco, sacky-dacky, humdrum, fuzzy-wuzzy, the obsolete words hoddy-doddy 'singleton', huffnuff 'conceited fellow'. Nursery words have only a playful character; they are not derogatory: humpty-dumpty, popsy-wopsy. Impersonal substantives with a derogatory shade are hurdy-gurdy, rumble-tumble 'cart', ragtag, claptrap. Adjectives fitting into this group are namby-pamby, fibberty-gibberty, hoity-toity, rumble-tumble.

8.3.6. The frequency of certain initial consonants and of certain alternations of initial consonants is striking. We note the great number of first elements beginning with [h]. In many cases, it is the underlying basis which accounts for the fact, as in handy-dandy (hand), hodgepodge (F hocchet), hurly-burly (hurl), hurry-scurry (hurry), but [h] is an unetymologizable element in hubble-bubble, helter-skelter, higgledy-piggledy a.o. (see list). Though early combinations with an etymological [h] may have played a part in the development, it seems more probable that the preference for the sound is due to some irrational symbolism. As Biese1 points out, a third of the combinations Müller2 collected

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1 Y. Biese, Neuenglisch tick-tack und Verwandtes. Neophilologische Mitteilungen XL (1939) 146 ff.
begin with [h]. The sound does not, however, occur initially with second elements. Favorite initials with second elements are [p] and [w]: namby-pamby, hanky-panky, hocus-pocus, roly-poly, gooseie-poosie (a nursery word) / popsy-wopsy, tootsy-wootsy, piggy-wiggy (a nursery word), fuzzy-wuzzy, curly-wurly (a nursery word), Shakespeare's kickie-wickie 'wife'.

A comparison between ablaut and rime combinations

8. 4. Most ablaut combinations have a real morpheme for a basis which is in many cases an expressive word of the 'sound' or 'move' class. There are very few words which are not based on a recognizable morpheme (see above 8. 2. 7). Things are different with rime gemination. On the one hand, there are many more words whose formative elements are obviously not expressive morphemes: even Stephen, handy-dandy, hodgepodge, harum-scarum (scare), higgledy-piggledy, hotsy-totsy, hy-spy, lovey-dovey, namby-pamby, peepie-creepie, walkie-talkie, roly-poly (roll), rowdy-dowdy, sacky-dacky, super-duper, slangwhang, teeny-weeny, titbit, willy-nilly. On the other hand, there are many more rime than ablaut combinations which are entirely unmotivated. Their rimming constituents do not call to mind any simple word of similar phonetic makeup (see above 8. 3. 3). Practically speaking this means that no basic linguistic sign is required so long as rime itself is preserved. In ablaut combinations, the strict vowel alternation, combined with a definite underlying morpheme, leaves no room for the complete facetiousness that is possible with rime combinations. While both ablaut and rime are basically playful, ablaut gemination is so in a neutrally esthetic way. Rime gemination is facetious, or playful in a childish, even babyish manner. In contrast to ablaut gemination, it also has a sentimentalizing effect (cp. the word namby-pamby which was coined as a play on the name of Ambrose Philips). The following passage, pseudo-advertisements in a newspaper, picturing the affected sentimentality of 'broken-hearted' people, illustrates the stylistic use of rime combinations: Dobbits-Tobbits. Better and most loving. T. Golly-Wolly. Why break heart of Babsie-Wabsie? Wire. Humble lumber. Humble dumble pumble lumber quamble tumble. No more Quamble of lumber pumble pumble pumble.

The linguistic value and status of variated twin forms

8. 5. 1. If we consider the strictly grammatical categories of word-formation, i.e. compounding, suffixation, and prefixation, we observe that a composite is a syntagma based on a determinant/determinatum relationship. Whenever a word is not analysable as consisting of meaningful signs, in other words, when it is unmotivated by content, it is not relevant to grammatical word-formation. The question therefore arises whether rime and ablaut reduplications which (at least in principle) are not made up of two real signs, are relevant to

1 O. Sitwell, Miracle on Sinai. The Albatross Edition pp. 73—74.
word-formation at all. A sign has two facets, that of the significate (signifié, content) and that of the significant (signifiant, form). Syntagmas such as rainbow, fatherhood, undo are motivated by the contents of rain and bow, father and -hood, un- and do. This is obviously not the kind of motivation that applies to ablaut and rime combinations. But we may find a motivation by form. It cannot, indeed, be denied that the rhythmic doubling and the elements of ablaut and rime do in fact constitute a motivation, and that these esthetic elements determine the character of the combinations based on them.

8.5.2. According to their motivation, we may distinguish the following types:

- **Sing-song** / **walkie-talkie** motivation by two signs (but see below)
- **Chit-chat** / **super-duper** partial motivation by the significate plus motivation by rhythm and ablaut (or rime)
- **Flim-flam** / **boogie-woogie** motivation by rhythm and ablaut (or rime) only.

All these words are basically motivated by rhythm and ablaut (or rime) underlying the significants of the twin form. Even those combinations which are composed of two independent words do not speak against this essential character of twin words. Singsong is not really a combination of two signs comparable to rainbow. Though a purely intellectual analysis may define the twin form as a compound, the joining of the two contents is not what makes the characteristic feature of the combination. Nor is walkie-talkie just walkie + talkie, but we have a playfully matched combination whose elements were attracted to each other, so to speak, by the esthetic element of rime while the putting together of logical contents is more or less incidental. Nobody would consider *cook book* a riming combination as here rime is incidental while the logical content of the constituents is the only relevant fact.

8.5.3. The semantic value of ablaut as well as rime combinations is determined by the particular phonic makeup of the twin form. This form either points to the significate itself (the rule in ablaut combinations), or it connotes the environment where the words originated or are used, or it signifies what their appeal is to the interlocutor (a great many rime combinations are so determined). From the form of an ablaut combination we can draw a conclusion as to the semantic content, which falls under one of the heads described above (8.2.6). One of the aspects of polarity is always implied: that of bipolar sound value with words denoting sound, that of to and fro movement with words of the ‘move’ class, that of ambivalence with words belonging to neither of the preceding groups. Occasionally, motivation by the form of ablaut seems to fail us. Tiptop, ririprap, and riprack do not appear to fall into any of the three groups posited above. Tiptop is a borderline case: it is primarily motivated by the two full signs tip and top while the ablaut is of secondary importance. The two other words are based on expressive symbolism. Ririprap is probably imitative of the sound of water. A riprap is not just any foundation of loose stones, but one used as an embankment or the like (see the quotations in DA). Rickrack is quite recent, so the etymology of DA (from rack ‘stretch’) cannot be correct as rack does not mean ‘stretch’ today. The word is obviously
derived from an expressive morpheme, the same that underlies *rock* vb and *G Ruck*, an assumption which the zigzag form of the braid seems to bear out.

8. 5. 4. The problem of motivation is more complicated in rime combinations. Rimming twin forms are, to a large extent, made up of fanciful elements, i.e. they consist of pseudo-morphemes. As a result, they have a less serious character than ablauting combinations. While the majority of the latter derive from one real morpheme and can therefore point to the significate, those rime combinations which are composed of pseudo-morphemes, cannot give us any clue as to the significate. Playful motivation by the form of the significant is therefore more complete with riming twin words. This applies also to combinations which are partly motivated by the significate. Rime is less serious than ablaut. This is probably the reason why ablaut often plays a grammatical role (as in IE languages, cp. *sing* / *sang* / *sung*) whereas rime never assumes any grammatical function at all.

The higher degree of purely playful motivation in rime combinations gives those words their particular stylistic quality. In general, they are indicative of the speech environment where they originated or where they are used. Of the examples in our list, quite a number are slang terms: *flubdub, heebie-jeebies, hoity-toity, hokey-pokey, hootchie-kootchie, hotsy-totsy, lovey-dovey, sacky-dacky, super-duper, ram-jam*. Others belong to the nursery: *handy-dandy, hy-spy, humpty dumpty, popsy-wopsy* (or slang), *tootsie-wootsie* (or slang), *piggie-wiggie* and other 'baby talk' words which I have not listed. Even those which are standard English usually betray by the rime jingle their origin in familiar, jocular speech: *harum-scarum, heller-skelter, hodgepodge, humdrum,ardy-gurdy, hanky-panky, juddy-duddy, fuzzy-wuzzy, hocus-pocus, titbit, ragtag, Walkie-talkie* and *boogie-woogie* are perhaps the best examples of this type. They have a pronounced slangy ring, but they form part of the common standard vocabulary as there are no 'serious' equivalents for them. Ablaut combinations, despite their emotional tinge, are hardly ever slangy. The only word I can think of is the vulgar Americanism *jimjams*.

8. 5. 5. With regard to rime motivation, one important point has to be taken into consideration—that of the length of rime combinations. Rime is either less felt or not at all in reduplicated monosyllables, at least when the words are forestressed. While *hiff*, with double stress, is felt to be a rime jingle (the rime was undoubtedly the reason for its coining, as the full combination high fidelity has no [ar] in the second element), nobody would consider *hobo* a rime word, and different speakers are differently struck by such words as *bigwig, nitwit, humdrum, hobnob, powwow, hubbub, claptrap*. It will, however, be noticed that the preceding words are all emotionally motivated and have a depreciative tinge, with the exception of *hobnob*. The specific character of the content seems to indicate that the words were coined as rime combinations while the fact that in many words rime is not felt to be present seems to show that, like any motivation (cp. the loss of motivation by content in such historic composites as *heirloom, cupboard, shepherd*), that of rime also may become obliterated.

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8. 5. 6. To sum up: while compounding, prefixing, and suffixing have a primarily practical purpose, i.e. that of signalling intellectual messages, rime and ablaut subordinate the intellectual purpose of signalling to the emotional one of playing. The type of emotional motivation we have in rime and ablaut combinations must not be confused with that which we find in appreciative suffixes. In dadd-y from dad, the suffix -y is a complete linguistic sign expressive of emotion. In ablaut and rime combinations, emotion is not expressed by a sign, but suggested only by the form of the significant: twinning combined with phonetic alternation. Adopting Bühler's theory of the threefold aim of human speech, we would say that the function of the presentation (Darstellung) of an intellectual message is subordinated to the functions of expression (Ausdruck) and appeal (Appell). The linguistic factors of speaker and interlocutor have the upper hand over the presentation of the matter spoken of, the extent of emotional motivation being greater in rime than in ablaut combinations.

Gemination and stress

8. 6. There is no fixed stress pattern for ablaut and rime combinations. OED gives double stress, for instance, to fiddle-faddle, tittle-tattle, snipsnap, tick-tack, pitter-patter, humdrum, hugger-mugger, hurdy-gurdy, hurly-burly whereas Webster has forestress for the same combinations. There is not much to be gained from such contradictory indications which are partly due to a lack of distinction between basic patterns and environmental variants. The stress criterion is not needed to establish the combinations as morphological units since they are characterized as such phonically and rhythmically. Even so, it is interesting to note obvious trends of stressing.

Combinations in which the idea of polarity is no longer emphatically in evidence, in other words combinations in which the emotional motivation is not underlined, have forestress. This applies to most ablauting twin forms used as substantives or verbs. In emphatic use, sound and move words, especially when functioning as subjuncts (adverbs) are double-stressed: tick-tack, click-clack, ding-dong. The emotional element of playfulness prevails in rime combinations. As a result, more words are pronounced with double stress. But again, where the emphatic character of a word has receded in favor of intellectual content, rime combinations tend to be forestressed too. This is the rule with monosyllabic themes, as claptrap, humdrum, flubdub, powwow, titbit, hodgepodge, hobnob. A few longer words join this group, though individual practice varies: fuddy-duddy, hurly-burly, hurdy-gurdy. Most rime words of this latter type, however, have two stresses: boogie-woogie, fuzzy-wuzzy, hanky-panky, hocus-pocus, harum-scarum, heebie-jeebies (also heard with forestress), hoity-toity, hotsy-totsy, hootchie-kootchie, holus-bolus, humpty-dumpty, lovey-dovey (also heard with forestress), mumbo-jumbo, popsy-wopsy, peepie-creepie, walkie-talkie, teenie-weenie, willy-nilly, higgledy-piggledy.

8. 7. Triple cbs also occur, though less frequently and in certain forms only. Repetition of a symbolic word is the most frequent. Exs are scuff-scuff-scuff, drip-drip-drip, jig-jig-jig (Lawrence), tong-tong-tong (Lawrence, q. Jesp. 10. 31).

### 8.8. Gemination

Gemination is very old in the Indo-European languages, but only *rime*-gemination apparently. We have it, indeed, in Old English, but all combinations belong to type *word-hord*, i.e. they represent words joined for the sake of rime. They have a poetic character (see Müller, 1) but the playful or facetious element of modern words is lacking. Ablaut variation is more recent. Such combinations are comparatively rare in Middle English (see Müller 2—4; they are also infrequent in Middle High German, cp. Wi 13. 3). Among the earliest recorded ablaut forms are *pitter-patter* 1425, *mish-mash* 1450, *ribble-rabble* 1460, *riff-raff* 1470, while examples of early rime combinations are *handy-dandy* 1362, *hiddy-giddy* Sc, *hodge-podge*, now obs. *hudder-mudder* (all 15th c.). Both rime- and ablaut formations increase in the 16th century. After 1600 (for rime combinations) and 1650 (for ablaut combinations) there follows a period of far lower productivity. Around 1800 a new rise begins, with rime combinations being much more in favor than ablauting twin words (see the diagrams in Biese 204). In times when the linguistic and literary standards of society are rigid and conventional, varied gemination, as having a popular or emotional character, will not be much expected. Hence the absence of such playful formations in the older stages of English, hence also, with the change of mentality in the Elizabethan period, the upsurge of productivity during the second half of the 16th century, and again, in more recent years, a new rise in such environments as are not governed by restraining literary tendencies or social codes (therefore obviously much more frequent at present in American English).
IX. CLIPPING

9.1.1. Clipping consists in the reduction of a word to one of its parts. It would, of course, be erroneous to think that the new word is nothing but a shorter form with no linguistic value of its own. It is true that the information received from a native speaker will probably be the one I have tentatively given: mag is short for magazine, math is short for mathematics. The difference between the short and the long word is obviously not one of logical content. The same informant, asked about the difference between book and booklet, would say that a booklet is a small book, thus adding the logic element of “small”. What makes the difference between mag and magazine, math and mathematics, is the way the long word and the short word are used in speech. They are not interchangeable in the same type of speech. Magazine is the standard term for what is called mag on the level of slang. The substitution of Mex for Mexican implies another shift in linguistic value in that it involves a change of emotional background, based on the original slang character of the term. Moreover, the clipped part is not a morpheme in the linguistic system (nor is the clipped result, for that matter), but an arbitrary part of the word form. It can at all times be supplied by the speaker. The process of clipping, therefore, has not the grammatical status that compounding, prefixing, suffixing, and zero-derivation have, and is not relevant to the linguistic system (la langue) itself but to speech (la parole).

The moment a clipping loses its connection with the longer word of which it is a shortening, it ceases to belong to word-formation, as it has then become an unrelated lexical unit. The speaker who uses the word vamp has no idea that historically the word has its origin in vampire. An American who speaks of pants does not think of the word as the shortened form of pantaloons. The study of such words has become a lexicological matter.

It is with the reservations just made that clipped words are treated in this book.

9.1.2. There are different kinds of clipping: 1) Back clipping (lab for laboratory). 2) Fore-clipping (plane for airplane). 3) Clipping-compounds (navicert for navigation certificate; Eurasia for Europe + Asia).

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9.2.1. Types lab (laboratory) and pub (public house)

The beginning is retained. The unclipped original may be either a simple word or a composite. The curtailments are made regardless whether the remaining syllable bore the stress in the full word or not. Microphone (with stress on the first), gymnastics (with stress on the second), pantaloons (with stress on the last syllable) are treated alike. Examples are:

9.2.2. ad (advertisement), bike (bicycle), cable (cablegram), coke (coca-cola), doc (doctor), deb (debutante), exam (examination), gas (gasoline), gym (gymnastics, gymnasium), math (mathematics), mike (microphone), memo (memorandum), prom (promenade ‘dance’), pram (perambulator) BE, polio (poliomyelitis), quins, quints (quintuplets).

Clipped forms of compounds or syntactic groups also exist: mutt (muttonhead), pub (public house) BE, pop (popular concert). Taxi is short for taxi cab (itself a clipping of taximeter cab), but the relation is hardly felt. Zoo is phonically isolated from its basis zoological garden.

There are infinitely more clippings than have been listed here, but their use is restricted to the slang of special groups: schools, army, police, the medical profession etc. I will give a few instances here: U (University), grad (graduate student), Tech (Technological Institute), tu (tuition), Psyk (psychology), loot (lieutenant) U.S., cap (captain), sarge (sergeant), medic (medical student), dill (delirium tremens), hyp (hypochondria). From criminal slang are pen (penitentiary), con (convict), ref (reformatory), dinah (dynamite), poke (pocketbook), poly (politician).

Each social milieu has its own vocabulary, but it depends on the influence that milieu exercises upon the general interest whether its speech habits will influence the general public.

9.2.3. The preceding type with an additional pet suffix is represented by looney (lunatic), Aussie, bolshie, commie, Jerry, bookie (bookmaker), cabby (cabman), middy (midshipman), movie (moving picture), speakie, talkie, toadie (toadeater), possibly by bargee, goalee, townie (see -ee sf).

In nursery language we have comfy (comfortable, one of the rare clipped adjs), grannie, hanky, nightie, pinny, undies.

9.2.4. First names are, in spoken language, more often used in their clipped than in their original form. A few instances may suffice: Al (Alfred or Albert), Ben (Benjamin), Con (Constance), Fred (Frederick), Gyff (Gyfford), Lu (Louisa), May, Mae (Mary), Nick (Nicholas), Prue (Prudence), Phil (Philip), Ray (Raymond), Sam (Samuel), Tom (Thomas), Vee (Veronica), Will (William).

9.2.5. With endearing suffix we have the same type in Abie (Abraham), Aggie (Agnes), Andy (Andrew), Archie (Archibald), Babbie (Barbara), Barney (Barnabas), Benny (Benjamin), Bertie (Bertram), Charlie (Charles or Charlotte), Christie (Christian), Connie (Conrad), Debby (Deborah), Eddie (Edmund, Edward, Edwin) etc., etc.
9.2.6. Clipped surnames also occur with or without suffix (app. not before the 18th c., see Sundén, p. 137): Boney (Bonaparte), Dizzy (Disraeli), Lindy (Lindbergh), Oppy (Oppenheimer), Rossie (Rossiter), Biggy (Biggs), Solly (Solomons), Talley (Talleyrand), Montie (Montgomery). Jespersen (La 9.7 and MEG VI. 29. 44. 45) quotes surnames used by Dr. Johnson, Thackeray a.o.: Bozzy (Boswell), Sherry (Sheridan), Kitch (Kitchener), Mac (Macauly), Pen (Pendennis), Cos (Costigan) etc.

In familiar intercourse, first names are much more frequent than surnames, which are therefore less often found in a clipped form.

9.2.7. Clippings of prefixed composites are co-op (cooperative association), co-ed (co-educational college female student), prefab (prefabricated house), demi-rep ( demi-reputation lady), non-com (non-commissioned officer), intercom (intercommunication system, a word from World War II aircraft slang).

Fore-clippings

9.3.1. Fore-clippings are less numerous. Examples are plane, phone, bus, cello, varsity (university), wig* (periwig), van* (caravan), loo* (lanterloo, a card-game), brolly (umbrella).

AE are coon ( raccoon), gator ( alligator), pike (turnpike).

9.3.2. First names are clipped this way, as Bella (Arabella), Bert (Herbert, Albert), Bess (Elizabeth), Dora (Theodora), Fred (Alfred), Gene (Eugene), Mabel (Amabel), Tina (Wilhelmina), Net (Antoinette), Nora (Leonora, Honora), Tilda (Mathilda), Tina (Albertina, Christina), Trix (Beatrice).

9.3.3. With an additional hypocoristic suffix we have the type in Baldie (Archibald), Betty (Elizabeth), Lottie (Charlotte), Netty (Antoinette), Sandy (Alexander), Tony (Anthony), Trixy (Beatrice).

9.3.4. The type is not in use with surnames. Jespersen rightly assumes that this type of name shortening originated in children’s language. Children are apt to forget the beginning of a word and retain the end only. Whoever has been in contact with little children will find that this is correct. Children have no use for surnames. That many of the shortened names occur in a strangely disfigured form is another proof of their origin, according to Sweet (The History of Language, p. 26) and Jespersen (in various places, last in MEG VI. 29. 44 and 29. 83). Children are unable to pronounce difficult sounds (which accounts for Bet, Bessy in place of Elizabeth, for Mun from Edmund, also for Biddy from Bridget, for Fanny from Frances, for Dol from Dorothy, for Hal from Harry, for Sal from Sarah, with substitution of [l] for difficult [r], whilst the same sound is substituted by [d] in Dick (for Rick, from Ricard, the old form for Richard). Children like to repeat the same sound (which accounts for Bob from Robert, Mem from Emily, Lell from Ellen). I should, however, say that the part played by the adult is as great as that played by the child itself. Children will mispronounce names, as they do any newly heard word. But the mother, grandmother and the rest of the family will lovingly shape the coining once more for it. Betsy and Tetsy do not look as if the difficult sound [ts] were due to
IX. Clipping

children’s language. It also seems difficult to me to explain Moll, Molly resp. Poll, Polly as a child’s misinterpretation of Mary, nor do I think a child could have shortened Rex from Reginald, Ike from Isaac, Suke, Sukiy from Susan. Why should not grown-ups also play with names in the way children do? As for variants like Peggy, Polly, Patty, Jespersen supposes that “they originated in reduplicative forms with p in the second member”. The sound p is so frequent with gemination that Jespersen’s explanation carries conviction.

9.3.5. Sundén¹ thinks that these names were originally shortenings of OE longer names which subsequently fell into disuse. With the Norman Conquest, the system of names was entirely changed and old pet names came to resemble pet forms of the new names. Thus Hick was orig. OE Hicca, ME Hicke which came to be phonically associated with Ricke f. Richard. For many other names see Sundén 141—171. This may hold for some names, but can certainly not be considered as the general formative principle.

9.3.6. Fore-clipped cpds are a weak type in English. The word cobweb is a case in point². OE ador-coppe ‘spider’ probably gave rise to an unrecorded form ador-coppe webbe which was then clipped like G (Eisen)bahnhof, (Wal)fschbein, (Sechs)vöchnerin. A recent instance is paperboy for newspaper boy.

The middle of the word is retained

9.4. Clippings with the middle of the word retained are infrequent. The type is instanced by flu fr. influenza, tee (detective), polly (apollinaris), first names such as Liz (Elizabeth), Fy (Seraphima), Lam, Lom (Columbus), Tave (Octavia), Lige (Elijah), Ves (Sylvester), Phronie (Sophronia), Tish (Letitia)³. Jespersen (La 9.7) holds that “the middle is never kept as such with omission of the beginning and the ending”, but in MEG VI. 29.7 his wording is less strict: “Very few words are shortened in (this) way.” But still he is disinclined to accept the type, explaining tee, Liz, Milly “from a rapid pronunciation in which the first vowel was syncopated”. In flu “neither the beginning nor the end would be likely as stumper words”. Why? Polly may be due to association with the feminine name, but otherwise it is scarcely possible to deny the existence of the type. Taters (taters) (potatoes) which Jespersen lists as an example, is a fore-clipped word in which the end is ‘adapted’ as in feller fr. fellow.

Clipping-compounds

9.5.1. The type cablegram fr. cable telegram illustrates the process of the clipping of an overlong cb. One part of the original cb most often remains intact. Exs of what we may call clipping composites are linocut (linoleum cut), capacitance (capacity + reactance), mailomat, the name of a postal machine

² W. Horn in Archiv für das Studium der neueren Sprachen 185. 119 (1948).
³ J. Combs, Language of the Southern Highlanders, PMLA 46. 1313.
Clipped composites are common with technical terms. Co- is a clipping for complement in astronomical terms such as co-latitude, co-longitude, mono- in physical chemistry is short for monomolecular, as in monolayer, monofilm, micro- is short for microscopic in microelement, microfilm etc., hydro- is a clipping from hydrogen in technological terminology while it stands for hydrozoa with zoological terms; oxy- is short for oxygen in terms of chemistry, photo- stands for photography in photo-process, photo-radiogram, photo-electrotype.

9.5.2 It is chiefly the first element that is clipped as the foregoing exs show. In electrocution clipping has affected the second element. In other cases, both members of a cb have undergone a clipping, as in cbs of the type navigate (navigation certificate). The type word is a coinage of World War II. Other instances are Westralia, the international words comintern (combining communist and international) and cominform (communist information). Clippings of this type are less frequent in English than they are in German where there are such words as Minko (Minderwertigkeitskomplex), Gestapo (Geheime Staatspolizei), Stuka (Sturzkampfflugzeug), Jabo (Jagdbomber), to give only a very few of the numerous words in existence. It is always the beginnings of words which are combined.

9.5.3. With the last group of words we are on the border line between clipped composites, formed as speech-economizing words, and the more or less arbitrary and artificial weldings made up of parts of words chiefly to suggest the fusion of several ideas. The reader may sometimes find that words which have been classed as manufactured words (see 10.3—6) might have been included in the preceding group. As a matter of fact, the various types sometimes overlap and it is not always easy or possible to draw a clear line. There are degrees and shades of naturalness as well as of clarity, variation declining from the shortening of a cb into mere stunts. Cablegram is more natural than the artificial comintern, Caltech is a still more considerable reduction in size of the long cb California Institute of Technology. But Pickfair, the name of the home of Mary Pickford and Douglas Fairbanks is a mere stunt (if I am not mistaken, it was Louise Pound who first used the word for coinings of this kind).

General remarks on clipping

9.6.1. Back-clipping, i.e. preservation of the first part, is practically the rule, as we have seen. Omission of the first part is much less common. Jespersen is inclined to explain fore-clipping as a method which originated in children’s language. This is why the type is chiefly represented by fore-clipped first names. Jespersen explains plausibly why certain fore-clippings were neverth-
less coined by adults: *bus* "which made its appearance immediately after the first omnibus was started in the streets of London (1829), probably was thought expressive of the sound of these vehicles and suggested *bustle*" (La 9.7); *phone*: "the beginning might just as well stand for *telegraph*"; *van*: "here the beginning would be identical with *car*" (but it would be so only in spelling); *cello*: "there would be confusion with *violin*". He does not explain *varsity* which by its pronunciation cannot be called simply a clipping of *university*. There are also certainly other elements which determine the kind of clipping (Je himself gives his theory only as "holding in the main"), as clearness, fullness of sound. The latter may account for *coon* as compared with *rac, varsity* as compared with *uni*. But op. A slang *U*, and German student slang *Uni*. I wonder whether the English and American preference for back-clipping is not merely a matter of practicality. If we assume that the main reason for clipping is the desire for shortness, it is certainly more practical to stop short after the beginning than to skip over to a second part. It is also probable that stress has played a part at the beginning (see Sundén 172—194) insofar as the first clippings (see below) are all from stressed words. This may have helped to pave the way for the firm establishing of the pattern.

9.6.2. As a rule, clippings are made from the spoken word. There are, however, a few words apparently based on the spelling: *zoo* (zoological garden), *gent* (gentleman, prob. from the former custom of putting the abbreviation *gent.* after a name, as e.g. *William Pinchon, gent.*), *mob* (mobile vulgus), *Jerry* (German), *par* (paragraph). The pronunciation would be different if the clippings were from the spoken word.

9.6.3. Except for names of persons, proper names are rarely clipped. Clipped names of cities are *Cin* for *Cincinnati*, *Jax* for *Jacksonville*, *Sacto* or *Sac* for *Sacramento*, *Frisco* (common), *Okey City* (Oklahoma), *Chi* (Chicago), *Philly* for *Philadelphia* (see Me/AL, p. 542—543. *Philly* is used passim in Ch. Morley, Kitty Foyle).

9.6.4. Verbs are rarely shortened. The word *canter* 1706 is OE clipping of *Canterbury* (*canter* sb is recorded from 1755). Clipped sbs may be converted, though, and come to look like clipped verbs, such as *perm* (permanent wave), *tot up* 'sum up' (total).

9.6.5. Clipped adjs are comparatively rare: *comfy* (comfortable) is common, *pi* (pious) is school slang, and there are such individual clippings (q. by Jesp. VI. 29. 65) as *awk* (ward), *imposs* (ible), *mizzy* (miserable). *Legit* (legitimate) is quoted by Elizabeth Wittman, but *fed* for *federal*, *Met* for *Metropolitan*, *Mex* for *Mexican* are clippings from the original words used as primaries (sbs) or, as in *Met*, from a syntactic group (Metropolitan Opera). But this is the type *pub* which we have discussed above.

9.6.6. I have not dealt with shortenings which are due to stress—the dropping of unstressed initial syllables, for instance, as in *mend* fr. *amend, fence* fr. *defence* etc. These phenomena do not belong to wf. The reader is referred to Emrik Slettenegren, Contributions to the Study of Aphaeretic words in English, Lund 1912, for a short survey to Jespersen VI. 29. 81 and Koziol 657/659, where a full list of references is given.
9. 6. 7. Clippings are mutilations of words already in existence. They are all characterized by the fact that they are not coined as words belonging to the standard vocabulary of a language. They originate as terms of a special group, in the intimacy of a milieu where a hint is sufficient to indicate the whole. Prep may be anything for the outsider, but it has specific meanings in school slang. Con is ‘conductor’ in the slang of American tramps, it is ‘convict’ in prison slang. Slang is a private language. But circumstances will always have it that words, in our case clippings, of a certain class or group pass into common usage, especially so if publicity is made for them in speeches, newspapers, on the radio, on the screen etc. Not every word has the same chances, and clippings of a socially unimportant class or group will remain group slang. It is usually easy to trace the milieu in which a clipping was coined. In school slang originated digs (diggings), exam, grad(uate), graph(ic formula), gym(nastics), math, matric(ulation), lab, mods (moderations, an examination at Oxford), prog (proctor), dorm(itory) and many others. Consols (consolidated securities), divvy (dividend), spec(ulation), tick(et = credit) and others originated in stock-exchange slang, whereas vet(era) cap(tain), loot (lieutenant) and others are army slang. We can place undies, panties, nightly (= nursery), bra, pants, spats (= shop slang), ad, mag, caps, par (= printers and journalists' slang) and undoubtedly a great many others. But there are such as can not with certainty be located. It is impossible to say whether yap (1880) originated in newspaper language or not, whereas the words movie, talkie, speakie sprang from the masses of picturegoers (see Movie Jargon, by Terry Ramsaye, ASp II (1926) p. 357). Yank was coined in the days of the Declaration of Independence (c. 1778), but under what circumstances is not clear.

9. 6. 8. We have seen that in the course of time a good many slang clippings have found their way into StE. We are then confronted with an important question. How are the conventional, unclipped forms affected by the acceptance of their clipped counterparts? It is against the law of balanced economy in language to have two words for the same thing. In the majority of cases the solution is that the clipping keeps its slangy or colloquial tinge. Through this attachment with its sphere of origin it is isolated from the traditional word, with which, therefore, it does not properly interfere. The other solution in case of homonymy in language is that one of the words gives way to the other. The result is either the ousting of one of the words from the vocabulary, or semantic differentiation to establish the balance of power. Both ways are to be observed with English clippings. In a few cases the full words have died out, so the clippings become new roots. This is the case with chap (chapman), brandy (brandywine), mob (mobile); cad is derived from caddie, but has semantically lost its connection with it. With other clippings we are no longer aware of their original character or are slowly forgetting it. Who still knows that cuss is derived from customer, miss from mistress, gin from geneva, brig from brigantine, cab from cabriolet, navvy from navigator, van from caravan?

9. 6. 9. There is more than one reason for the clipping tendency. Foremost comes the English tendency towards shortness, which goes farther than in other European languages. Monosyllabism is only the natural result to which love for short words finally leads. Clipped words are a great quantitative gain,
though it seems doubtful whether they are anything more than useful and practical. It is not by chance that the quantitative method of modern science was born and reared in Anglo-Saxon countries. The Anglo-Saxon mind is in the main a practical one, and such a method as word-clipping is primarily the work of a practical-minded nation. Owing to their "efficiency", clippings are still more in favor in American English, though refined speech will avoid them, at least for the time being. It may be the feeling of one whose mother tongue is not English that clipping without regard to the organic structure of a word is a kind of disrespect for the language. Clipping-compounds are, I think, less objectionable, as long and clumsy combinations are avoided that way (monolayer is certainly preferable to monomolecular layer).

There is a certain amount of playing also in clipping, the kind of technical enjoyment felt with new instruments and machines. It is not the purely aesthetic pleasure which lies at the root of rime or ablaut reduplications, for instance.

Historical remarks on clipping

9.7.1. Clipping of words is a modern phenomenon. The shortening of a syntactical group, i.e. the phenomenon generally called ellipsis is old (cp. L cupreum for aes cupreum, vidua for mulier vidua, E capital (c. letter), private (p. soldier) etc.; a full treatment of this is found in Jesp. MEG II. 8. 9; VI. 8. 93/94 and 29. 2)\(^1\). Old are only shortenings of names, which are not infrequent in Old Greek, OHG and a few other languages (app. not in Latin)\(^2\). But clipping, as we understand it today, was unknown in ancient times. The following shortened names always retain an ending: OGr Telys for Telykratēs, OHG Wulfo for Wolbrand a.o. In English, the clipping of common sbs does not seem to be older than the 15th c., whereas clipped proper names are older (see Sundén)\(^3\). Clippings are most in favor in present-day American English. The headline style of newspapers with its craving for short words at any cost has played a very important part in this development (see Me/AL\(^4\), 182 ff and Suppl. 334 ff. where a list of reference books and articles is given).

9.7.2. To the oldest examples of clipped common nouns belong coz 1550 (cousin), gent (1544), obs. mas 1575 (master), chap (chapman) 1577, winkle 1585 (periwinkle). Shakespeare has cowish (King Lear IV. 2. 12) 'cowardly' which presupposes the sb cow for coward (which Kittredge, in his edition of King Lear, note to IV. 2. 12 quotes from The Bugbears IV. 2. 48 (ed. Bond, Early Plays from the Italian, p. 126). Sh uses cock for cockboat (King Lear IV. 6. 19). 17th c. are van (vanguard), quack (quacksalver), hock (hockamore 'Hochheimer'), brandy (brandywine), hack (hackney), mob (mobile), cit (citizen),

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\(^1\) For the problem of ellipsis in general see Wilhelm Havers, Handbuch der erklärenden Syntax, Heidelberg 1931, p. 257/258 where a full list of reference is given.


\(^3\) Sundén, pp. 144—146 cites Wulf f. Wulfric. But the clippings were usually suffixed: Will-oc f. Will-beald etc.
wig (periwig), phiz (physiognomy), plenipo (plenipotentiary), sub (for any sub-word), tar (tarpaulin?) ‘sailor’.

18th c. are confab (confabulation), console (consolidated securities), brig (brigantine), gin (geneva), cad (caddie), hip, hyp (hypochondria), spec (speculation), demi-rep (app. demi-reputation lady), yank. Cp. Swift’s remarks in ‘Introduction to Polite Conversation’ (q. Jesp. VI. 29. 41): “The only Invention of late Years, which hath any way contributed towards Politeness in Discourse, is that of abbreviating or reducing Words of many Syllables into one, by lopping off the rest . . . Pozz for Positive, Mobb for Mobile, Phizz for Physiognomy, Rep for Reputation, Plenipo for Plenipotentiary, Incog for Incognito, Hyppo or Hippo for Hypochondriacks, Bam for Bamboozle, and Bamboozle for God knows what.”

A few clippings from the 19th c. are cab (cabriolet), fan (fanatic), van (caravan), auto, ad, doc, pants, vet, photo, frat (fraternity), prep, lab, math, gym, exam. This century has coined perm, movie, talkie, speakie, Jerry, commie, bolshie, mike, san (sanitorium) and so many more. In their way of clipping (as well as in other domains of word handling) news magazines such as Time and Variety (esp. the latter) are far ahead of normal usage. “Each has developed a dialect that is all its own” says Mencken (AL^2, Spl. I, p. 337) and quotes a long list of super-coinages, such as pix for pictures, nabe for neighborhood, intro for introduction, preem for premier, ork for orchestra and others. The language of both papers has been heavily criticized in the U.S. as well as in England.
X. BLENDING AND WORD-MANUFACTURING

10. 1. The term blending is generally used for quite heterogeneous things. Koziol's treatment (49—74) comprises words incidentally changed through association with other words (as OE gifan f. gefan, under the influence of niman), folk-etymologies, secretion of sfs, manufactured words. Wentworth also uses the term blend-word in a wide sense, including words, as Shakespeare's triumpherate (f. triumph, after triumvirate), Milton's wittcaster (f. wit, after criticaster), which were coined in imitation of phonetically or semantically similar words, Richardson's suffixal derivative dastardice (f. dastard, after cowardice), the jocular re-interpretation of words or phrases, as Renovated, facultea, Jevunited States etc. He treats as a blend practically any word that has undergone a formal alteration due to external influences, as assault with a latinizing l, advantage with a latinizing ad and other words of this kind.

Blending can be considered relevant to word-formation only insofar as it is an intentional process of word-coining. We shall use the term here to designate the method of merging parts of words into one new word, as when sm/oke and f/og derive smog. Thus blending is compounding by means of curtailed words. However, the clusters sm and og were morphemes only for the individual speaker who blended them, while in terms of the linguistic system as recognized by the community, they are not signs at all. Blending, therefore, has no grammatical, but a stylistic status. The result of blending is, indeed, always a moneme, i.e. an unanalyzable, simple word, not a motivated syntagma. Once the blend smog has been formed, it ceases to contain the two (curtailed) morphemes which the word coiner intended to combine in it. Unless speakers have received extralingual information about the composition of the blend, such words as brunch (br/éak/sfast + l/unch) smaze (sm/oke + h/aze) and others are simple words, the subject matter of lexicology.

The only case of curtailed words which have morphemic character and form bimorphemic blends are those whose formation is based on the principle of expressive symbolism, all belonging to the sound and move class. They are dealt with in the chapter "Phonetic Symbolism". With the exception of this pretty strong class, blending has apparently not led to the coining of many common words.

Type slithy

10.2. The fancy of individuals is responsible for the coining of blend-words for expressive purposes, but whether they catch on or not depends on the constellation of so many circumstances. Lewis Carroll's slithy (f. slimy and lithe), chortle (f. chuckle and snort) have become common property, Shakespeare's glaze (f. glare and gaze) has not, nor has Carroll's mimsy (for flimsy and miserable). The French socialist Fourier coined the word phalanstère f. phalange (a group in his system) and monastère, a word which was anglicized as phalanstery. But such a scientific term escapes the test of general use as it is restricted to a certain speech milieu. More or less serious are slantindicular (slanting + perpendicular) 1840, squarson (squire + parson) 1857, mingy (mean + stingy) 1928. The language of commercial advertising and name-giving favors such coinings (swimsation = swim + sensation, glamazone = glamor + amazone), and writers, especially magazine writers are fond of facetious blends, but they seldom pass into general use. Common are gerrymander (proper name Gerry + salamander), motel (motor + hotel), smog (smoke + fog) 1905, brunch (common in AE, breakfast + lunch). Smaze (smoke + haze) is listed in Webster 1955, but it hardly is in serious use. Sprig 14... may be a blend of spray 'twig' and twig.

Word-manufacturing: types Socony, sial, radar etc.

10.3.1. More or less arbitrary parts of words may be welded into an artificial new word. This is really a case of word-manufacturing. The process is chiefly used with names of new scientific discoveries, trade-names, names of organizations, new foundations or offices; but occasionally, and chiefly in American English, personal and geographical names are also coined in this way. The chief patterns are letter-words: as Socony (fr. Standard Oil Company of New York), and syllable-words, as sial (fr. silicon and aluminium). Often the two methods appear combined, as in radar (fr. radio direction finding and range), or suffixes are added, as in ammelide (fr. ammonia, melam and -ide).

10.3.2. Letter-words or chiefly letter-words are Care (Cooperative for American Remittances to Europe), Unrra (United Nations Repatriation and Rehabilitation Administration), Pluto (pipeline under the ocean), Eto (European theater of operations), Cominich (Commander in Chief), Waves (Women Appointed for Volunteer Emergency Service), Nana (North American Newspaper Alliance), Lox (liquid oxygen explosive), Panagra (Pan-American Grace Airways), psia (pounds per square inch absolute), Yipsel (Young People's Socialist League, formed irregularly), athodyd (air thermodynamic duct), ookkie (Dramatic Order Knights of Khorassen, formed irregularly), Pen (Poets and Playwrights, Essayists and Editors, and Novelists), futhorc (the first letters of the runic alphabet, used as a name for the alphabet itself). World War II produced many such words, and the preceding exs are only a very small collection of the words that have been coined. For more instances the reader is referred to one of the several dictionaries of abbreviations. The first world war was less productive, the type having really caught on in the
last years only. Words from the first world war are Waac (Women Army Auxiliary Corps), Wraf (Women’s Royal Air Force), Wren (Women’s Royal Naval [Service]), Anzac (Australian New-Zealand Army Corps), Dora (Defense of the Realm Act). Recent are Nato (North Atlantic Treaty Organization), Shape (Supreme Headquarters Allied Powers Europe), Unesco, Seato and many other organizational names. A recent common substantive is ufo (unidentified flying object), a slang word from World War II is the adj snafu (situation normal, all fogged up).

10.3.3. On the whole, it must be said that the tendency to form letter-words is much weaker than that of quoting a cb by giving the first initial of each word in the form it is pronounced in the alphabet, as GI, YMCA. Letter-words are more frequent in German, where the type is instanced by words such as Agfa (Aktiengesellschaft für Anilinfabrikation), Hapag (Hamburg-Amerika Paketfahrt A.G.), Preag (Preußische Elektrizitäts A.G.), Bamag (Berlin Anhalter Maschinenbau A.G.) etc. A Swiss word coined during the second world war is Wust (Warenumsatzsteuer).

10.3.4. Letter-words are comparatively new in European languages. The real vogue has set in with our century only. The method is old with Jewish names. In the Middle Ages the custom arose of forming personal names from the initials of a title, name and the father's name, as Raschi (fr. Rabbi Schelomo Jizchaki), Rambam (fr. Rabbi Mosche b. Maimun), Schach (fr. Schabbataj Cohen), Hida (fr. Hayyim Joseph David Azulai), to give only a few instances (see The Jewish Encyclopedia, New York and London, vol. IX, p. 155). Cf. also the mnemonic words for the possible kinds of syllogisms, as Bramantip, Camenes, Camestres, Darapqi, Darii etc., app. not in E use before the 16th c. Modern letter-words do not seem to due to either of the foregoing types.

10.4. The progress of science, chiefly chemistry, in the 19th c. played a great role in the development of word-manufacturing. The numerous chemical substances and compounds newly discovered called for new words to name them, and the names were chiefly formed by welding parts of the words denoting the constituent elements into an artificial word. Exs are acetal (f. acetic alcohol) aldehyde (fr. alcohol dehydrogenatum) aldol (f. aldehyde and alcohol), alkargen (f. alkarsin and oxygen), amatol (f. ammonium nitrate and trinitrotoluene), carborundum (f. carbon and corundum), chloral (f. chlorine and alcohol), chlorodyne (f. chloroform and anodyne), hydrazine (f. hydrogen, azote, and -ine), methoxyl (f. methyl, oxygen, and -yl), phospham (f. phosphorous amonia).

From other spheres we derive such words as cusecs (f. cubic feet per second), altazimuth (name of an instrument for determining altitude and azimuth).

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2 The words are said to have been invented by Petrus Hispanus (Pope John XXI) who died in 1277 (see Rudolf Eislter, Wörterbuch der Philosophischen Begriffe, 4th edition, Berlin 1929, s.v. Schlußmodi).

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Trade-names of the type are common (see Louise Pound, Word-Coinage and Modern Trade Names, Dialect Notes, vol. IV, part I, 1913 and Wentworth). A few of the countless words are Ampico (American Piano Company), Nabisco (National Biscuit Company), Sunoco (Sun Oil Company).

Only a few years old is the international word Benelux, the Benelux countries being Belgium, the Netherlands, and Luxemburg.

10.5. Special cases of word-manufacturing are the sfs -ol and -yl in chemical terminology.

The sf -ol represents the last element of 1) alcohol or 2) phenol, 3) sometimes it stands for L ol(eum) ‘oil’. In function 1) it forms the names of substances which are alcohols in the wider sense, as carbinol, methol; in function 2) it forms names of bodies belonging to the group of phenols, as anthrol, cresol; in function 3) it forms a few technical terms such as furfurol, indol (see OED s.v. -ol sf).

The sf -yl represents OGr hyle ‘matter, substance’. This manufactured morpheme forms names of radicals on a NL basis of coining, such as carbonyl, salicyl, sulphuryl a.o. (see OED for details). The type was introduced into scientific nomenclature by the German chemists Liebig and Wöhler (c 1830).

10.6. Many American place-names are fabricated blends. Towns near the borders of two States are given names which are compounded of clipped parts of the names of the States, as Dakoming (Dakota + Wyoming), Del-Mar (Delaware + Maryland), Calexico (California + Mexico), Nosodak (North Dakota + South Dakota), Kanorado (Kansas + Colorado). The place-name Norlina is blended from parts of the name of the State North Carolina, Colwich is a blend of Colorado and Wichita. Many more of such arbitrary blends are listed in Louise Pounds, Blends, and Henry J. Heck, State Border Place-Names, ASp. 3 (1928) p. 51. Parts of the names of one or several persons connected with the place to be named were sometimes amalgamated to form the new place-name: Cadoms is simply the name of one C. Adams, Gilsum is a blend of Gilbert and Sumner, Caldeno (the name of a waterfall of the Delaware Water Gap) is fabricated out of the names of three visitors, C. L. Pascal, C. S. Ogden, and Joseph McLeod. Rolyat, a town in Oregon, is the name Taylor spelt backward.

Blends of first-names are common, but they are especially frequent in the States. Examples are Olouise (Olive + Louise), Rosella (Rose + Bella), Adrielle (Adrienna + Belle), Leilabeth (Leila + Elizabeth), Armina (Ardelia + Wilhelmina). Only feminine names seem to be blended, but men’s names may form part of the blends, as in Romiette (Romeo + Juliette), Adnelle (Addison + Nellie), Adelloyd (Addie + Lloyd). See also Pound, Blends.

I have given so little space to this subject as most of the manufactured words form no part of the general vocabulary. The reader who is interested in this type of words is referred to the several books and articles written on the subject.
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agent of verbal action: -ant, -er (see
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animal, sfs denoting — s: -er, -ereal,
-ing
approximation: -ish. See also ‘re-
simblance’
appurtenance: he who belongs to:
-an, -ian, -er, -ese, -ist, -ite belonging
to (adj): -al, -ial, -an, -ian, -arian

Principal sense groups of morphemes
Principal sense groups of morphemes

change of state: -en, -ify, -ize
character: having the character of . . .:
-ical, -ish, -like, -ly, -ous, -some, -y. See also ‘resemblance’
cloth: -een, -ette
collectivity: -age, -dom, -ery (-ry),
-hood, -ship
condition of . . .: -acy, -age, -ancy
(-ency), -ate, -ation, -cy, -dom, -ery,
-hood, -ity, -ment, -ness, -ship
degree; prfs denoting — : arch-, over-
proto-, sub-, super-, under-
depreciation: -ard, -by, -ling, -ton, -ish
depresentation: de-, dis-, un-
diminutive, endearing sfs: -ette, -ic
(-y), -kin, -let, -ling
document, see system
domain: -dom
endearing sfs, see diminutive sfs
fee: -age
female, morphemes denoting —, see sex
instance, specific of . . .: see condition
instrument: see agent
intensity: be-
language: -ese, -ic, -ish
negation: a-, dis-, in-, non-, un-
number, prfs denoting — : bi-, demi-, di-
mono-, multi-, pan-, poly-, semi-
tri-, twi-, uni-
opposition: anti-, contra-, counter-

Partner: co-
passive sbs: -ee
personal sbs, sfs forming — : an, -ian,
-arian, -ant, -ard, -by, -ee, -een, -eer,
-er, -ess, -ette, -ician, -ie, -ing, -ist,
-ister, -ite, -kin, -ing, -ster, -ton
place, morphemes denoting — : after-
back-, by-, down-, forth-, in-, off-
out-, over-, through-, under-, up- / anty-, circum-, om- (en-), epi-, extra-
fore-, inter-, intra-, intro-, meta-
mid-, para-, peri-, post-, pre-, preter-
pro (-amnion), retro-, sub-, super-
supra-, sur-, trans-, ultra- / -age, -er,
-ery, -ing, -ment
position, see place, condition
possibility: -able
preference: pro-
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reiteration: re-
resemblance: crypto-, neo-, pro-, pseudo-
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result of action: -age, -ing, -ment, -ure
reversal of result: dis-, un-
sex: male: boy-, he-, man-, female:
she-, girl-, lady-, woman- / -ess, -ette
slogan, see system
system: -ism
tendency, having a — to: -ive
time, morphemes denoting —: after-
ante-, arch-, ex-, fore-, mid-, post-
pre-, proto-
tool, see agent

Suffixes arranged according to their function

sfs forming sbs: -acy, -age, -al, -an
(-ian, -arian), -ance (-ence), -ancy
(-ency), -ant (-ent), -ard, -ate, -ation,
-by, -cy, -dom, -ee, -een, -eer, -el
(-le), -er, -ereal (-real), -ery, -ese, -ess,
-et, -ette, -ful, -hood, -ian, -ician, -ie
(-y), -ine, -ing, -ism, -ist, -ister, -ite,
-ity, -kin (-ikin), -let, -ling, -ment,
-mo, -ness, -ship, -ster, -ton, -ure
sfs forming adjs: (those marked 2) form
adverbs as well -able, -al, -an
(-ian, -arian), -ary, -ed, -en, -ese,
-esque, -ety, -fold 2), -ful, -ic, -ine,
-ish, -ive, -less, -ly, -most 2), -ory,
-ous, -some, -ward 2), -y
sfs forming vbs: -ate, -en, -er, -ify (-fy),
-ize, -le
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(arranged according to the suffix or termination of the derivative).

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