VII. PHONETIC SYMBOLISM¹

- 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: |I| is suggestive of the subjectively, emotionally small and therefore frequent with diminutive and pet suffixes (-ling, -let, OE -icel, G -lein, L -icellum, -iculum). Initial |f|, |p|, less so |b|, often express scorn, contempt, disapproval, disgust: pish, pooh, ph, fe, foh, faugh (cp. the exclamation fiddlesticks, I don't care a fig, contemptuous words such as fiddle-faugle, G p, pah, puh, F f, 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 lists 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
- ¹ H. Hilmer, Schallnachahmung, Wortschöpfung und Bedeutungswandel. Halle 1914. J. Reinius, Onomatopoetische Bezeichnungen für menschliche Wesen, besonders im Deutschen und Englischen. Studier i modern språkvetenskap utgivna av nyfilologiska sällskapet 4. Stockholm and Uppsala 1908. O. Jespersen, Language ch. XX. O. Jespersen, Symbolic value of the vowel i (Linguistica, Copenhagen 1933, p. 283ff.). M. Grammont, Traité de phonétique. Paris 1933 (pp. 377ff.).

used with words denoting noises coming from or connected with the throat. teeth or alveoles and is withdrawn with an explosion. Initial |g| is almost only after the movement of the tongue: the tip of the tongue strikes against the denoting striking or knocking against something. They may be imitative producing a similar result. The symbols /t/ and /d/ are frequent with words explosion of sound in the outside world by a movement of our speech organs perceives as an explosion outside. We imitate, in instinctive parallelism, an 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 has probably a great share in the development of initial symbols, as with /b/ beginning with this sound. With words denoting sound, the imitative principle or less incidental, of several words, as sweep, swing, both OE, and OE swengan suggestive character, the sound [sw] in itself contains nothing suggestive of the concept 'swinging movement', but is obviously a secondary result, more have developed as the result of word blending. While /kr/ is found in many forth. Some of the symbols are originally imitative symbols whereas others languages with words denoting harsh or unpleasant noises because of its

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 $k \cdot p$, $k \cdot b$, $t \cdot p$ 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 wf 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 [1]), 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 espressive 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 picung 'puncturing'), crack, hit, tuck. ME are clack, flick, hack, kick, peck, smack, snack, rap, tap, whop, pop, slip, tap, clip, flap, chip, nip, pat, hit, flit. More recent are tick 1440, snap 1495, quip 1532, click 1581, quack 1617, slap 1632, whack 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', plod 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.

7.10. |m|, |n|, |n|, |n| at the end or in the middle of a word express continuous vibrating sounds. OE are thunder (OE funor), arch. chirm (OE cirman) 'roar, chatter, warble', hwinsian 'whine', whine (in OE only used for the whizzing noise of an arrow), groan, grunt, sign. ME are hum, gruntle, rumble, obs. bumble 'buzz, boom', clink, tink, tinkle, tingle, chime, dindle (now Sc) 'vibrating sound or movement'. Later are boom 1440, ting 1495, tang 1556, twang 1542, bang 1550, clang 1576, chink 1581, ding 1582 in sense 'speak with wearying reiteration', whimper 1513, drum 1541, thrum 1553, grumble 1586, ping 1856 (said of a rifle-bullet, a mosquito etc.), pom-pom 'machine-gun' 1899.

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, creak'), ME are chirp, chirt (So), snore, snort. Then come purl 1586, chirrup 1579, purr 1601, chirr 'trill like a grasshopper' 1639. Cp. also sf -er.

7. 12. |1| 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, mewl.

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 hiss and siss are ME. Newer is buss 'kiss' 1570 (similar words in other languages, as L basiare, G küssen, G dial. Busserl, Tu (= Persian) puse).

7.15. $|\S|$ 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

flush, blush, crush, rush. Then come plash 1513, gnash 1496, slash 1548, clash 1814, whoosh 'sound of something rushing through the air' 1856. 1500, splash 1715, smash 1778, squash 1565, squish 1647, swish 1756, slosh air. The symbol is not older than ME. The chief forms which occur are /æš Aš, iš/, but we have /u/ in woosh. ME are mash, dash, crash, flash, gush

indicated by the following consonants. imitated sound. But whether the sound is sharp, cutting, vibrating etc. is direct sound imitation the vowel denotes the pitch, volume, timbre, of the The role of the vowels is different from that of the consonants. In

click, clip, clink, tick, ting, titter. A high (or thin) tone is rendered by /1/, as in hiss, swish, whimper, whinney

Low pitch is rendered by back vowels, as by |n| or |n| in knock, blob, pop, plop, flop, plod | bawl, roar, snore, snort, caw, by |n| in moan, groan, by |n| in hoot, boom, coo, whoop, whoosh, croon, tu-shoo 'call of an owl', by |av| in howl, youl.

plump, flump, bubble, grunt, grumble, gulp, guggle, puff, gush. Indistinct low pitch is expressed by /a/, as in hum, drum, thrum, bump

Compare also OE cawan 'caw', granian 'groan', ME hoot (= |o|) 'hoot'

hum (= |v|) 'hum', howl (= |u|) 'howl'.

(a), as in bang, tang, twang, rap, tap, slap, pat, crack, clatter, patter, cackle Volume and length of a sound are expressed by a lengthened vowel or Clear and distinct sharp medium sounds are expressed by |x| (= 0E, ME

snort, bawl, caw, roar, drawl | growl, howl, youl diphthong: hoot, toot, boom, coo | moan, groan, drone | whine, chime | snore,

sound meet here. [1] sometimes connotes thinness, as in *cling*, tink a.o. Pitch and volume of developed into $[\mathfrak{I}(\mathfrak{r})]$ and is no longer expressive of sound. Shortness of the vowel sounds occurring today are [æ, ɛ, 1, ɒ, A]. The EMoE sound [ir] has in PE Short noises are rendered by short vowels (see preceding word lists). The

long vowels. It is impossible, however, to affirm anything as to the difference rapid movement usually goes with short vowels, slow movement goes with between the vowels. With verbs of movement we observe the following tendencies: quick

tap, rap, pop, plop, flop etc. lists of sound words in which many verbs denote sound as well as movement: rapid movement, as in hop, hobble, skip, snap, snack, snatch. Cp. also the above Short vowels, chiefly in combination with final plosives, are used to express

movements, though secondarily the idea of slowness or length may arise. titter, sizzle, tickle. The sfs express repetition, continuation of short, rapid Apparent exceptions are verbs with the suffix -er and -le, such as patter

which is obviously its counterpart though it is much more modern), teeter nothing but the lengthened counterparts of sip, though seep is only used intransitively. The preceding observations naturally apply only to such words but not 'draw' with jerks. Water seeps (or sipes, dial.), and seep, sipe are perh (cp. titter), slide, glide. The long vowels are hardly accidental. We may 'pull' Long vowels go with slow or long movement, as in flow, float, fleet (cp. flit

> out movement (as move, throw etc.) resp. short vowel with short, quick movepossible argument that long vowel is not necessarily combined with drawn as were presumably coined symbolically. I stress this just to counter the ment (as look, lift etc.).

377). This is, of course, right, but only partly. It overlooks the fact that an 7.18. The imitative principle is often misunderstood or misrepresented. It onomatopoeia is not a mere imitation of a sound. a certain extent accidental" (Je La 20.3, a little differently Grammont TP is that "our speech organs are not capable of giving a perfect imitation of all of the corresponding noise. The explanations as to the differences in languages is commonly thought that an onomatopoeia should be the exact rendering 'unarticulated' sounds" and that therefore "the choice of speech sounds is to

others which in slight variants are used in many languages. phemes are understandable in a certain linguistic system only, there are no motivation of the sign by the significate. I have discussed this point in a call for a certain sound; in other words, we will want to know whether there is This will lead us to the question whether a certain idea may not necessarily coining of words and what the symbolic value of the respective phonemes is. us in wf is to know which particular phonemes are used in a language for the in question, but it has no bearing on word-formation. The point that interests 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 point, admitting the 'signe motivé par le signifiant' for onomatopoeias. This to a certain extent arbitrary as well. Charles $Bally^2$ modifies Saussure's standcussed. Ferdinand de Saussure¹ maintains that the sign is arbitrary, i.e. it is paper 'L'étude des onomatopées's and tried to show that while certain morof a linguistic system, that they are few in number, and that their coining is not motivated by the significate, that onomatopoeias are never organic elements Here it is necessary to touch on a question that has been much dis-

sound will invariably be rendered by some s sound, and so on. sarily 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 movement have already shown that to a certain quality of sound there neces-The foregoing remarks upon symbols and their connection with sound and

of the language. Words with the initial symbol /hw/ which are frequent in coining is largely dependent on the phonemes and phonemic combinations another. As every language has its own phonological system, onomatopoeic character. But there are also elements which differ from one language to G flüstern, Tu fisildamak, L susurrare etc.) which are those that have imitative Such onomatopoeias have usually one or more elements in common (E whisper, 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. Onomatopoeias are not coined haphazardly. Their composition is

¹ F. de Saussure, Cours de linguistique générale⁴, 101—102.

Ch. Bally, Linguistique générale et linguistique francaise², 127—139, Bern 1944.
 Dialogues I. 124ff. Publication de la Faculté des Lettres d'Istanbul 1949.

English would be impossible in French or German, words with initial $/{\rm kn}/{\rm m}$ 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/ renders the 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 päng-päng '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 *glim, *glint, *glint, *glint 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 \$\psi_ash\$, \$\psi_ash\$, \$\psi_aish\$, 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 flip '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 flick, flit, flap, flash (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 flow, fleet, flutter, fly, flee, float (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 Nida¹ 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-

 E. Nida, Morphology. The descriptive analysis of words. Ann Arbor. University of Michigan Press 1949, p. 61.

> must be considered the determinant while the final symbol is the determinatum. to dismiss these elements from strict morphematic analysis. The initial symbol character of such elements to expressive words, he finally sees himself compelled the morpheme b). On the other hand, as he has not limited the morpheme morpheme or, as he calls it, phonestheme utter), b|low, b|reak, and b|eat (with phematically related also such words as, sh/utter and m/utter (with the same restrict the morphemic character of initials and finals to symbol-coined words, regard morphemes as Saussurean signs, i.e. phonetic-semantic entities, and Dwight L. Bolinger² is much nearer the ideas set forth here. But while words, but basically he holds the same argument Nida uses. A paper by seems inclined to admit them on account of meaning correlation in some to deny the morphemic character of expressive symbols. Zellig S. Harris¹ Atlantic Treaty Organization). This reservation granted, it is hardly possible from motorist hotel) and manufactured words (type NATO from North treated in word-formation: blending of non-expressive words (type motel grammatical sense, but monemes (one-morpheme words). This is a feature morphemes in that they combine into units which are not syntagmas in a into bimorphemic units (tea-pot, un-do, child-hood). Symbols differ from ful standing of words, prefixes or suffixes which are full morphemes and combine Bolinger carries the principle much farther, tentatively considering as morthat expressive words have in common with other types which are usually binations. The argument holds good insofar as, indeed, symbols have not the

7.26. According to whether the initial (as /fl/) or the final (as /fp/) 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/, /dž/, (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

¹ Zellig S. Harris, Methods in structural linguistics. Univ. of Chicago Press. Second Impression 1955, 177—178 and 193—194.

² Dwight L. Bolinger, Rime, Assonance, and Morpheme Analysis. Word 6. 117ff. 1950. Cf. also Morton W. Bloomfield, Final root-forming morphemes, American Speech XXVIII. 158—164, 1953.

Greek had $smýx\bar{o}n$ beside mýxon, smýraina beside mjraina (both fish names), $smyriz\bar{o}$ beside $myriz\bar{o}$ 'anoint, perfume', smilax beside milax 'yew tree', $smyger\delta s$ beside $moger\delta s$ 'miserable, wretched', $smilr\delta s$ beside $milr\delta s$ 'small, little' (the derivative $smilrin\bar{c}s$ '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|smelt where the process of fusing metal, for instance, would suggest such an idea). One might also think of an emotively expressive origin (cf. $moger\delta s|smyger\delta s|smilrin\delta s|smilrin$

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 paddle), 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.

of valve' (1517), G klack, klapp, klipp-klapp, klatschen etc. The initial /kr/ 1520, cri-cri = criquet 'grasshopper' (12th c.), croasser 'croak' 1564, crin-crin 'jarring violin', G krachen, kreischen etc. shriek, crack', królalon 'braggart, a rattle instrument', L crepare, *critare also has counterparts in other languages: OGr krazō 'scream', krizō 'scream limping foot), F claquer (15th c.), clic-clac 'clack', clapper 'clap', clapet 'kind clocca 'clock', LL cloppus 'lame' (apparently from the clapping noise of the variations of the 'root' kal (kaleō, klazō, kleizō etc.), L clamo, clangor, LL denoting vocal and other noises is found in OGr klozo 'cluck, click' and other same root occurs in tokmak 'knocker' and other words. Initial /kl/ with words 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 etc. Initial /t, d/ for the concept 'strike against' is frequent in many languages, 'sound of a drum', bondir (in Old French = 'resound'), G bum, bums, bimmeln noise', L bombus 'dull noise' (hence the various 'bomb' words), bālāre 'bleat', LL bombitare 'hum', ML baulare, F bêler 'bleat', boubou 'cry of the owl', boum other languages: /b/ occurs in OGr be the bleating baa of sheep', bombos dull (= F crier), F craquer 1546, cric-crac 'noise of breaking or tearing something' Sound-imitative initial symbols frequently have counterparts in

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 plash we get the word splutter 1677 which was later followed by splash 1715 and splutter 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, hout, yout 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 pyffan 'puff', pūnian 'pound' (apparently from the sound), pipian 'blow the pipe'. Later are pipe 1250 = peep 1460 'cry of young birds', puff 1225, pur 1620, purl (said of a brook) 1586, pipit (a bird) 1768, pop 1386, dial. pash 1362, 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 pāng for the sound of a pitfer 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'), *peck* 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..; (plumpe 1374 is fr. OF plumgier which is itself partly onomatopoeic), plash 1513, plod 'walk heavily' 1562, plop 'drop into water without splashing' 1833 = plap 1846. AE is plodge 'walk in mud or water, plunge' (ADD) which is obviously a blend of plod and plumge.

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
 Marchand, The categories

1492 (with sound imitation of the metallic sound, op. 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 coining 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 /sn/; 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), splosh 'splash' (ADD, 1818), splodge 'trudge or plod splashily through mud or water' 1859 (an ablant variant of splatch 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 spryttan and spryttan 'sprout', sprengan 'sprinkle'. The vb sprout is not recorded before 1200, but the word is certainly OE, too, as the second pto asproten 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'. I387, 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 babble 1230, obs. bumble 'buzz' 1386, buzz 1398, boom 'hum, buzz' 1440, dial. bum 'hum loudly' 1450, bawl 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 (chilblain). The symbol was strengthened by the loans blaze in obs. meaning 'blow' 1384 (= ON bldsa) and blister 1300 (= OF blestre 'tumor'). A variant of blister is bluster 1494. Other words are blust 1573 and blore 'violent blowing' 1440 with the same imitative final as snore.

/b/ 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 'blubbering', balbuire 'blubber', bulla 'bubble, nob' etc.) on the other. Perhaps this is really at the root of the idea '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 blab 1607, its obs. variant blab 'blister' 1656. Blizzard 1829 belongs to the 'blow' class, with the -tzz 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 blathan), 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.), blate '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, tattle 1481, tip 1466, ting 1495, toot 1510, tuck (of a drum, 13..., not "a. ONF. toker, 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), tunn 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 tupple and the imitative symbol /tif/.

With verbs of movement /t/ is infrequent: dial. titter 'totter' 1374, its ablant variant totter 1200, its U.S. variant teeter 1846, toddle 1600, tottle

¹ See W. Meyer-Lübke, Romanisches Etymologisches Wörterbuch s.v. tok

'totter' (ADD), all words expressive of unsteady movement. No vb *tot is recorded in OED, but there is an adj totty '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 etymon; 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 troter.

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-, I 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 stempan '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. stroddle 1607, perh. ablaut variants of striddle 'straddle' etc. 1530 (the latter is either a frequ. of stride or back-derived from striddling), stroll 1603 (the second element is that of roll, loll etc.).

Struggle 1386 is prob. a blend suggested by strive 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', dump 'fall heavily' 1300, dab 'soft blow' 1300 (cp. tap), its frequ. dabble 1557 'paddle, besputter' (sense influenced by drabble), 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. daddle 'walk totteringly' 1787 = StE doddle 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 dandin '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 dreosan and drusan 'fall', dreahnian 'drain', dragan 'drag' dreflian 'drivel', dros 'dross', draught, draw, drive, drop, drip, drain (all OE)

Droop 1300 and dregs 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, I. clamo etc.). OE are call, cow (after the sound), kiss. OE cēo 'jackdaw' is now chough 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 gēac as was G Kuckuck fr. OHG gauh, MHG gouch), in kink 'gasp for breath' fr. OE cincian, 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 onomatopoeta for the sound of scissors cutting something: ket ket (**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 chipian 'call', clatrian 'clatter', OE clucge 'bell' probably belongs here, too. Newer are clack 1250, clap 1225, cluck 1481, clash 1500, click 1581, clutter 1556 (var. of clatter), clang 1576, clank 1614, clamber, clamor 'bell-ringing' 1611, clamp 'clang of bells' 1674, clump 'tread heavily' 1665, clink-clank 1790, clamp 1808 (dial. 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' (frequ. 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-stæf). 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 etymon, 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 '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), scurry 1810 (/sk/ plus -urry), scuffle 'scrambling fight, tussle' 1579 (/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 [š], [skr] does not everywhere seem to have developed into [šr], as several word pairs with [skr] and [šr] exist in ME and MoE: e.g. screw|shrew (dial.) fr. OE scrēawa, ME screpe|schreape fr. OE screpan 'scrape' (see OED s.v. scr.). Scritch 'screech, shriek' is not recorded before 1250, but prob. repr. OE *scricc(e)an (as clitch fr. clycc(e)an), with the roots |kr.k|, |skr.k|, cp. OHG scritch = MHG schrien and MHG krischen 'screech, shriek'. A variant of scritch is scratch 1474. Other words are scream 1200 (the |m| is symbolic of the vibrating continuation of the sound; there is also the variant shream 1230), screak dial. 'screech' 1500 (prob. a variant of creak, not "a. ON. shrækja" as the OED has it), screech 1560 (another variant of scritch), obs. scranch

'crunch' 1620, with AE dial. variant scraunch (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 krazzōn = 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; scribble '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' 1537. 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), gurgle 1562 = guggle 1611, guttle 'eat greedily' 1654, guzzle 'swallow liquor greedily' 1576, gargle 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. Gulf 'puff, whiff' 1825 is one of the many -uff variants, while word.

7.53. |g|/ is an initial with words expressive of the idea light, shine', as glass, gleam, gleed 'live coal', glisten, glow OE, OE glöm 'twilight of the evening', glure, glent 'glean, shine', glimmer, glimpse, glisten, arch. glister, glitter, 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 |g|/ in 'look' words: obs. glaze 1601 (fr. gaze 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 deeptoned, grumbling, inimical or menacing noises, as occurring in OE gryllan '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 plusuff though the word is orig. spelt grof). The symbol has been strengthened by loans such as groin 1300 (OF grognir, grogner), grutch 1225 (OF growcher). A variant of the latter is the now usual grudge 'grumble' 1450. Grum 'glum, harsh' 1640 is the symbol blended with glum. The word growse '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, grollen (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 -amble characteristic of unsteady movement, see -amble) and faffle 'stutter' 1570 (both with imitative force of the initial). Fumble1508 is a variant of famble, as final -umble is a variant of -amble, fuddle 'tipple, booze, muddle' 1588 has the -uddle of muddle, 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: flit 1200, flush 1300, fling 1300 (with the ing of swing), flap, orig. 'slap' 1330, flash 1387, flack 'flap, flutter' 1393 (obs. in StE), flacker 13.. (obs. in StE), flick 1447, fluster 1422, obs. flatter 'float, flutter' 1375 with variant flitter 'flit, flutter' 1542, flirt 1553, flip 1594, flop 1602, flurry 1698, flump 1790, flunk 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 1835 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 -ibble 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. $|\theta|$ and $|\theta r|$ have formed a few words, as thunder OE, throb 1362, thrum 1553. Thud 1513 is orig. So, 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 wagian 'oscillate, shake' (which resulted in now obs. waw), there seems to have existed an intensifying waggian which is recorded through wag 'shake, oscillate' 1225. Variations of the stem are found in wiggle 1225 and waggle (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 wag (waggle) and straddle 1565 (orig. 'spread the legs wide apart in walking'). Wobble 1657 is perhaps waggle/hobble (OED suggests connection with dial. G wabbeln) 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 waggle / dangle (waggle so that it comes loose,

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'.

as sweep, swing, swingle sb, OE swāpan '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 wag. Sway 1300, orig. meaning 'move', is app. a variant of OE wegan '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 swengen), 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 swāpan) 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. twittle 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 twirt 1598, tweak 1601 (app. the long vowel variant of twick; the spelling is no proof that the word was ever pronounced with [\alpha]; 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 'quake, quiver, shake', as cueccan 'shake, obs. quetch', quake, cuecorn = cuyrn 'quern, handmill for grinding grain', all OE, cuavien '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 quashte, 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'

7.64. /skw/ is the s- variant of /kw/. It introduces words expressive of discordant or discordantly eruptive sound, as squeal 1300, squeal 1547, squash 1565 (cp. quash), squall 'scream discordantly' 1631 (var. of squeal which was prob. never [æ] as the spelling variants of the OED seem to point out, so quall was coined on the basis /i-o/), squish 1647 (var. of squash) and its var. squidge 1897, squiter 1596, squirt 1460 (the symbol plus spirt), squawk 'cry with a harsh note' 1821, squirk 'half suppressed laugh; squeak' 1882.

Words denoting movement are squirt (see above), squabble 'wrangle, brawl' (with abble denoting noise or confusion, see abble, cp. also LG kabbeln 'quarrel'), squirr 1710 (cp. skirr, whirr), squiggle 1804 (cp. wriggle), 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, hiss 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, proboug. 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 hip 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-skeller 1593, hubble-bubble 1632, hurdy-gurdy 1749 a.o.

drawn from its sheath' 1891, whit 'sound of a bird' etc. 1833, whing 'highpitched ringing sound' 1912 (var. of whang). 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 whinny 1530 (var. of hinny 1400 which is perh. partly fr. F hennir), whizz 'dull, soft, sibilant sound' 1856, wheep 'long-drawn sound of a steel weapon 1547, whiff 'puff, whistle' 1591, whifte 'blow in puffs' 1568, whoop 1568, whoo (cp. sneeze), whew 'whistle' 1475, whisk 1480, whish 1518, whimper 1513, briskly' 1250, whoop 1400, whire 1400, whop 'cast, strike' 1400, wheeze 1460 OE are whine, whistle, whisper; later are whirl 1290, whip, orig. 'move the wings coinages of this group would belong in 7. 59. However, even for those speakers parallel to /h/. For many speakers, /hw/ is no longer distinct from [w], so beginning of a vocal sound or of forcible movement and is thus somewhat 7.66. /hw/ is an initial with words denoting noises of air or breath or forcible 1608, whicker 'snigger, titter' 1656, whack 1721, whoof 'gruff cry' 1766, whang /hw/ has graphemic value, which has induced me to treat this initial separately. movement. Originally it probably renders the sharp sound of breath at the

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), cp. also OHG murmuron), obs. murr 'a form of catarrh' 1420—1756, mutter 1388, mumble 1362, mum 1371, 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, |m| imitating the affected making of a "mouth" (in Turkish there is a similar expression for the same idea: [mɪrɪŋkrɪɪŋk]) / 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 snoft, sniftung 'mucus of the nose', sniftan 'snite, clean the nose'. Snout is not recorded before 1220 but must have existed in OE as the denominal verb sniftan shows. The following are recorded later: snatch 1225 (the symbol plus catch), snack 1300 (the symbol plus -ack), snap 1495 (the symbol plus catch), snack 1300 (the symbol plus -ack), snap 1495 (the symbol plus catch), snack 1300 (the symbol plus -ack), snap 1495 (the symbol -ack), snap 1495 (the symbol plus -ack), snap 1495 (the symbol -ack), snap 1495 (the symbol plus -ac

tensifying sf -t, as in grunt, fart etc.), snot 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 fnēosan), sneer 1553 (plus jeer 1553, see initial /dž/), snuff 1527, snarl 1589 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 snap; sneap 'nip, pinch' 1588 may be a dialectal variant of the same. Snick 'snip, 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 sleven (—1513). With the /sl/ of these were coined slither 1200 (var. of slidder), slive 1410 (var. of sleve 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, slaughter OE, OE slitan '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) slag 1853 'strike hard' (the symbol rius flag)

slam 1691 (see -am), slog 1853 'strike hard' (the symbol plus flog).

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 slub 'sludgy mud' 1577 (dial.), slush 1641, sludge 1641 and its var. slutch 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 hringan 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, rabble 'speak in a rapid, confused manner' 14.., obs. rough 'cough' 13.., ruckle 'rattle in the throat' 1530 (the OED assumes Scand. origin), rat-tat 1774, rub-a-dub 1787 and row-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, lush 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 racaid (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. OE. Later symbol words are sob 1200 (prob. a var. of sop), 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 (see -ip), zoom 'make a continuous low-pitched, buzzing sound' 1886, in aircraft slang also with meaning 'aircraft's steep climb' 1917. ADD quotes zoon, zune 'go or run fast with a hum or buzz' 1886.

7.73. /š/ 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.² 'collide' etc. which wever, explainable from shock var. of shake (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, brandish, wave'. Shamble 'walk unsteadily' (17th c.) is prob. shake 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 fail 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. /tš/ is obviously emotionally expressive, like its variant /dž/. 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' (! cēowan 'chew'), cēo 'jackdaw', now chough '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. chirl '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 1583 is a variant of shock (the original form is chock with the /tš/ perh. influenced by chin; the earliest quoted sense is 'give a gentle blow under the chin'), chuff (for sound of engine).

sound' 1526 (cp. gnar, snar), jug 'imitation of one of the notes of the nightoffers some difficulties as the symbol has formed no other words, except the is not suggestive of the senses; with meaning 'jingle harshly' (1494) the word is word received the symbol /dž/. The French word has [ž], a fact which the author F ça jase. Many etymologies have been suggested, but if Joffe is right, the ingale' 1523 (cp. chuck, chug), gibber or jibber 1604 (ablaut var. of jabber), jam into water in Turkish cump (pron. [džump]) 'plump', jar' make a harsh grating (originally denoting the accompanying noise; cp. the exclamation for a fall (a bell), bump' 1520, jumble 1529 (orig. 'make a rumbling noise'), jump 1511 more recent gabber; it is, however, prob. a variant of -abble), jowl or joll 'toll however, a var. of jingle 1300. Then come jabber 1499 'gabble' etc. (the -abber babble; dispute, wrangle' appears to represent OF jangler; the symbol angle in Old French). No coinages occur before about 1300. Jangle 1300 'chatter, (the initial occurs in Turkish, for instance, with symbol coined words, also seems to have overlooked). 1706, jazz 1918 (Judah A. Joffe in WORD 3. 105/106 derives the word from |dž| is the voiced variant of /tš|. It is app. emotionally expressive

There are a number of words implying jerky movement, as jag '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 frequ. 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 fidget) 'jig, hop, skip about', jerk 1530, jink 'jerk, quick turn' 1700 (in second world war used for maneuvering aircraft) / job 1490 with var. jab 1825 'stab, prod, poke' etc., jib 'pull a sail' 1691. Jounce 1440 is prob. formed with the /dž/ 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 geste) 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, yow (excl) 1440, yowl 1450, its var. yawl 13... (cry of pain, grief, distress), yawp 'yelp, cry harshly' etc. 13... yammer 1481, yap 'bark sharply' 1668, youf '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, yoop (sound of convulsive sobbing) 1848, yow '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'.

-ack: crack OE, brack 1200 'noise, outcry' (obs.), clack 1250 'chatter, prate, cluck, cackle', snack 1300, snack 1530 orig. 'kiss noisily', thwack 1530 'beat soundly', quack 1617 (said of ducks), whack 1719 'thwack' etc., flack sb 1823 'slap, blow' (dial.).

-addle: straddle 1565 '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

arabble.

-am: lam 1595, clam 1674 'clang of bells', slam 1691, jam 1706, flam 1796 'signal of drum', (partly) ram ME, wham 'slam, bang' AE, not in OED or Spl.

-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 fumble), 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 (Se 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, rap 1340, snap 1495, swap* 1350, slap 1632, yap 1668, plap 1846.

slap 1632, yap 1668, plap 1846.
-ar: gnar 1496 'snarl', obs. snar 'snarl' 1530, jar 'make a harsh, grating sound' 1525.

-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.

at: bat sb 'stick' 1205, vb 'strike' 1440, pat 1400, chat 1440, rat-tat 1774

spat 'start up sharply' etc. AE 1809, splat 'pat, slap, spat' 1941 (ADD). -atter: clatter OE, chatter 1225, batter 1325, patter 1394 (at the same time representing pater 'paternoster' = 'recite prayers'), hatter 'bruise with blows' 1450 (now Sc and north. B dial.), smatter 'prate, chatter' 1440, splatter 1784, yatter 'chatter' 1866.

-attle: rattle OE (in hrætelwyrt 'rattle-wort'), tattle 1450, prattle 1532, twattle*

1573 (no longer in this group).

-awl: sprawl OE, crawl 1300, scrawl 1380, spawl 'spit coarsely' 1598 (arch.), are yawl 13.. 'cry of pain, grief', brawl 1375, bawl 1556, drawl 1597. drawl 1652 H (words for drawn-out or clumsy movement). Sound-words

7.79. -eak: creak 1325, dial. shcreak 1500, squeak 1547, dial. peek, peak 'squeak' 1808.

-eep: peep 'cry of young birds' 1460, cheep 1513.

-eeze: sneeze 1499 (see initial /sn/), wheeze 1460.
-ick: pick, prick OE, kick 1380, tick 1430, flick 1447, nick 1523, click 1581, -eer: fleer 1400 'jibe, jeer, sneer' (prob. a Scand. word, cp. dial. flire 'grin' (see OED fleer v.), sneer (see initial /sn/) 1553, jeer 1553 (see initial dž).

-iddle: is found in several words denoting 'trifle' of which the basis may be Other words coined after it are piddle 1545, tiddle 1560, twiddle 1540 fiddle which in this particular sense development is first recorded 1530 'spasm of the muscles' 1440).

snick 'click' 1700, crick 'sound of a grasshopper' 1601 (perh. also in sense

-iff: sniff 1340, whiff 'puff, whistle' 1591, tiff 'outburst of temper' 1727, miff 'huff, tiff, petty quarrel' 1623, biff 'blow' 1890 (ADD), obs. tiff 'drink, sip' quiddle 1567, diddle 'sing without distinct utterance of words' 1706, diddle (away) 'trifle (away), waste' 1826.

nominator is 'noise of breath or liquor'. (influenced by tipple), cp. also squiffy 'drunk' 1874. The common de-

-iggle: the symbol is found with words expressive of small, continuous movements or sounds, as wiggle 'wobble, waggle, wriggle' 1225, wriggle

ing: as imitative of sound it underlies ring, sing OE, ding 'knock, hammer' sound'. Words denoting movement are swing OE, sling 1290, fling 1300 1495 = squiggle 1804 = scriggle 1806, sniggle 'snicker' 1815. whing 1882 'move with great force or impetus'. 1300 (arch.), ping 1886, whing 1912 'word for a highpitched ringing

-ingle: jingle 1300, tingle 1388, dingle 1573.

-ink: tink 1382, clink 1386, chink 1581.

other vowels and are thus doubly connected.
-irl: whirl 1290, swirl 'whirlpool' 1425 (orig. Sc), chirl 'warble' 1818 (Sc). -ip: clip 'cut' 1200, whip 1250, orig. 'move (the wings) briskly', hip 'hop ment'. Some words are at the same time ablaut variants of words with snip 1586, flip 1594, zip 1875. The common denominator is 'quick move-1250, skip 1300, nip 1393 (variant of obs. gnip, knip), tip 1466, ftip 1594.

-irr: whirr 1400, skirr 1548 'move hastily, make a whirring sound', chirr 1639 express quick movement or whirring sound 'trill like a grasshopper', squirr 1710 'cast with a whirling motion'. All

-irt: squirt 1460, flirt 1553, orig. 'fling', spirt 1570 (cp. -urt).
-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.., hiss 1388.

it: spit OE, slit 1205, fit 1200, hit 1450, skit 1611 (quick movement). Cp. also to denote great quickness of movement or disappearance. 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

-itch: twitch OE attracted hitch 1440, pitch 1205, all suggestive of jerky

iver: quiver 1490 joined shiver 1200 (orig. chiver, of unexplained etymology, the [8] 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 shaking motorcar' also fits in semantically. thunk, the original meaning of the word is 'fail, bungle'. The sense 'cheap,

-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'

izzle: expresses continuous quietly sputtering noises, as of rain or fat in a pan: $\tilde{m}izzle$ 1483 (the m from $\tilde{m}ist$ perh.) and drizzle 1543 (see initial /dr/) denote light, continuous rain (see OED s.v. mizzle v.¹ with a few LG and ing fat is expressed in sizzle 1603, frizzle 1839, fizzle 1859 H. Du. exs to which may be added LG fisseln (pron. [z]). The noise of sputter-

7.80. -oan: groan OE seems to have attracted moan which is recorded as a an incidental gap in the existing material. moan is frequent in the 14th c. The drawback of my explanation is that found in phrase make (one's) moan, beside which the phrase mean (one's) in OED in a 19th c. text. The deverbal sb groan is not recorded before mænan 'moan' developed the deverbal sb mene, recorded 12..., last quoted sb 1225. The verb is recorded much later (15th or 16th c.). The OE vb moan is older (1225) than groan (1300); but perhaps this is merely due to 1300 (as gran, gron), chiefly in cb give a groan. Moan sb is also chiefly

ob: sob 1200 (perh. a variant of sop) attracted throb 1362.

-od: seems to be imitative of sound, underlying plod 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 also used for things, its derviative podgy 1846. 'gorge, stuff' (see initial /st/), podge 1833 'short, thick and fat p. or animal',

-oll: sound words are knoll 1379 'sound of a bell', toll 1452, jowl, joll 1520 'toll 1100), troll 1377 (see initial /tr/; usually derived fr. OF troller, see OED (a bell), bump (the head)'. Expressive symbolism underlies loll (as Ekwall, English Studies 28, 108 shows, the word must have existed before

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 roler (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: blore 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; op. bum, boom, OE pūnian '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' (ablant variant of didder).

-uddle: the final occurs in several words which defy etymological explanation, as cuddle, fuddle, huddle, nuddle, 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, he reluctant, envy' which is the variant of now obsolete grutch 1225 (= OF groncier, 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 dree 'labor' (OE drēogan). 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). Snudge 1545 'miser, niggard' may be from snap, snatch (money) plus the symbol. Sludge 1649 may be the symbol extension of slub 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., snudge 1633 'remain snug and quiet'). A variant of -udge is app. -odge with a similar emotional value (see -odge). Words in -odge are newer which would point to the influence of the symbol -udge. Pudge 1808 is a by-form of podge 1833 'short and thick p. or thing'.

-uff: is an onomatopoeic variant of -iff and symbolic of an outburst of breath, air or smoke: puff 1225 (perh. the var. of OE pyffan), buff 'burst into a laugh' etc. 1297 (obs. exc. dial.), huff 'puff, swell' etc. 1583, snuff 1527 (the OED supposes Du origin), whuff 1896 'puff' = Sc fluff 1818 = Sc fuff 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 puff '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. soufflet) 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 cuff 'strike' 1530 (with the initial of bick).

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 blof 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 scuffle 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 toggen, 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 tūcian' 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 roccian. 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 [I] (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.

-um: a symbol for vibrating sounds has formed hum 1300, dial. bum 'hum loudly' 1450, obs. bum 'beat, thump' 1579, drum 1540, thrum 1553, strum

1775, tum 1830.

-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 frequ. 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 /fl). -ump: is expressive of heavy fall and impact in dump 1300 'fall heavily', plump 13..., jump 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 |1| of lour, lower; in early quotations lump and lower form a set group), drump 'sulk' 1875 = dial. glump 1746 (with the initials of grunt resp. glum, 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 /kr/). There are many concrete sbs with the basic meaning 'lump' matched by counterparts in -ump (bunch, hunch, lunch, clunch / bump, hump, 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. hwrr '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 -iri

are graphic variants of the same symbol.

ush: is a variant of -ash; it has formed flush 1300, obs. lush 'dash, strike' 1330, obs. dush 'dash' 14th c., rush 1375 (the word is generally considered to be AF russher, var. of russer), gush 1400. Obs. frush 13.. 'strike violently' is prob. OF fruissier. 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 [8] 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. buskle 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.

-uzz: imitative of sound it has formed buzz 1398 = huzz 1555 = obs. fuzz 1676. In a semantic variant it underlies fuzz 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 $|1 - \varpi|$, corresponding to older $|1 - \varpi|$. Next comes $|1 - \varpi|$. 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.

|1- &| chitter 1386 | chatter 1225, clip 1200 | clap OE, clitter 1528 | clatter OE, dib 1609 | dab 1300, flick 1447 | flack 'flap' 1393, flicker OE | flacker 13..., giggle 1509 | gaggle 1399, grip OE | grab 1589, obs. gripple 1591 | grapple 1580, higgle 1633 | haggle 1583, jibber 1824 | jabber 1499, pribble and prabble are first recorded as a pair 1598, scritch 1250 | scratch 1474, scribble 1467 | scrabble 1537, snip 1586 | snap 1495, ting 1495 | tang 1556, tip 1466 | tap 1225, tittle 1399 | tattle 1481, whing 1591 | whang 1844.

tap 1225, tittle 1399 | tattle 1481, whing 1912 | whang 1844. | | 1-v| drip OE | drop OE, hip 1250 | hop OE, jig 1588 | jog 1548, jiggle 1836 | joggle 1513, sip 1386 | sop OE, tip 1225 | top OE (OED denies the obvious connection between the two words), tit 'term for a small object' 1548 | tot 'fmall object' 1548 | tot

'small child' 1525.

|1 - \varepsilon | clinch 1570 | clench 1250, glint 1440 | glent 13 ..., pick OE | peck 1382.

1-υ/ historically speaking, we have the alternation in sniffle 1631 / snuffle 1583, spirt 1582 / spurt 1570, spirtle 1603 / spurtle 1633, tick 1440 / tuck 13.. (now dial., chiefly Sc, 'beat the drum'; see 7.29; OED derives it from ONF toquer).

|\(\lambda - \pi|\), corresponding to earlier |\(\mu - \pa|\): 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
|\(audd)\) and iter rather visual connotation), splutter 1677 | splatter
|\(1784\). Cf. also bluster 1434 and blast 1300. The verb paddle 1530 is obviously

a variant of puddle 1440, while rugged 1330 seems to belong to ragged

|x-y| champ 'chew' 1530 = A dial. chomp, gabble 'jabber' 1577 / gobble splash 1715 = splosh 1818, tot 'child' = A dial. tat, tad. (said of a turkey cock) 1680, jab 1825 = job 1490, plap 1846 = plop 1833,

 $|\alpha - \alpha|$ occurs in tush | tosh (exclamation), pudge | podge short and thick person', putter/ potter.

qualitative opposition relates quiver 1490 to quaver 1440. OE / tweak 1609 belong here only synchronically. A similar quantitativescreech 1560, titter 1400 / teeter 1846, sip 1386 / seep 1790, while twick 'twitch Quantitative differences of vowel underlie crack OE / crake 1386, scritch 1250

Many expressive roots have several variants: clitter 1528 / clatter OE / clutter

spittle 1480 / spattle (obs. exc. dial.) OE / obs. spettle 1422. creak 1325 / obs. crook 1325, didder 1375 dial. = dadder 1483. obs. exc. dial. = titter 1374 | totter 1200 | teeter 1846, flitter 1542 | obs. flatter 1375 | flutter OE, dodder 1617, all meaning 'shake, tremble', diddle 'cheat' 1806 = daddle 1886, 1330 | chap 1325 | chop 1362, crick 1601 | crack OE | crake 1386 | croak 1460 1556, click 1581 | clack 1250 | cluck 1481, blab 1656 | blob 1536 | bleb 1607, chip

and drop, hip and hop, jig and jog, sip and sop, tip and top, tit and tot. Phonic variation of the root implies the changes in content outlined above (7.8.—10. and 16.—17.). Cf. chitter and chatter, clip and clap, tip and tap, drip

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 flacker, higgle, jibber a.o.). But in general, the expressive principle itself does stomp). Others seem to have had restricted currency anyway (as chitter, dib, flack, of slightly different acoustic qualities (cf. putter/potter, champ/chomp, stamp) shows. Some are obsolete. A few are dialect variants of StE forms with a vowel However, not all of the words exist on the same synchronic plane, as the list

Word coining through prothetic s

of obs. cratch 1320; obs. scrawl 'sprawl' 1380 is a variant of crawl 1300; scrunch dial. variant of peer 1591 (perh. influenced by spy). variant of nip 1393 (or a variant of snap); speer 1866 is an American and English queasy 'squeamish' 1459; squelch 1620 is the variant of quelch 1659; snick squash 1565 is the variant of quash 1387; obs. squeasy 1583 is the variant of but the variant of hump 1300; dial. squench 1535 is the variant of quench 1200. The Sc word slump 1718 for which the OED assumes a LG etymon is nothing cannot explain is obviously a variant of crag 1300; scratch 1474 is a variant prothetic s. We give here some more examples: scrag 1567 which the OED snip, nick 1700 is the variant of nick 1523 (infl. by snip); snip 1586 is the 1825 is a variant of crunch 1801; obs. scringe 1608 is the variant of cringe OE. We have already referred to the modification of roots by means of a

no derivative value synchronically. thetic s seems to be merely playful. At any rate, the opposition $s \sim \text{zero has}$ There is no denotative semantic difference between the variants; the pro-

Variation through voicing resp. unvoicing of the consonant(s)

such expressions as a doddering fool. Haggle 1583 is commonly used with the meaning 'bargain' and is different from hackle 'hack, cut roughly, mangle' totter 1200 is the common word while dodder 1617 is hardly known except in is sniffle 1819 interchangeable with snivel 1400 (as in snivelling coward), and one and the same speaker: grabble 1579 is hardly used for grapple 1530, nor synonymousness which dictionaries give for some pairs will not be felt by sprinkle 1400. Original grutch 1225 changed into grudge 1450. But the partial documents, according to OED, and springle 1502 is now rare or archaic for form scrincan, tuck 13.. and tug 1225 are often used interchangeably in early doss 1583. The Old English word scringan 'shrink' is also represented by the sludge 1649 by dial. slutch 'mud, mire' 1669, toss 1506 has a dialect variant iation, which it is impossible to tell). Hack 1200 is matched by Sc hag 1400, and later usage (if this historical difference was not also one of dialectal var-1530 and smudge 1430. The difference is often one of dialect only or of earlier speaker. Snicker 1694 and snigger 1706 are pretty synonymous, so are smutch marked as such (at least in part), are not synonymous for one and the same a derivative principle. A very few words are used synonymously, while others, opposition 'absence of voice ~ presence of voice'. But the opposition is not 7.84. We find many pairs of words that are differentiated formally by the

use of in the coining of expressive words, the opposition 'absence of voice \sim $(cp. 7. 9)^1$. presence of voice' has no derivative relevancy, i.e. no grammatical standing show that, though the sound value of voiced and voiceless consonants is made The semantic differences between sop and sob, tap and dab, pat and bat also

¹ My manuscript had long been completed when I read H. Wissemann, Untersuchungen zur Onomatopoiie. 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' (Schallinstance the treatment of initial symbols) our interpretations differ. See my review of the book in Indogermanische Forschungen 64 (1959) 183—187. Wissemann has arrived at results similar to my own, while in other respects (for nachahmung). As for the value of speech sounds and several general principles,