

WORD FORMATION IN ENGLISH: EXTENSION, NARROWING, BIFURCATION AND BACKFORMATION

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Abstract: There is a number of mechanisms in English that help enlarge its lexis. In addition to derivation and compounding, generally considered to be most productive in English word formation, this paper aims at outlining a number of other available means of getting new meanings of words in established forms in English. More precisely, the intention, in fact, is to provide an outline of particular types of word formation in English, focusing on extension, narrowing, bifurcation and backformation. Most examples representing the corpus in this study have been taken from Hudson (2000). Crystal (2002), Adams (1973), Kövecses (2002) and Bauer (1983) have also proven invaluable as sources of a significant portion of examples in the study.

Keywords: English word formation, extension, narrowing, bifurcation, back-formation

1. INTRODUCTION

There are many mechanisms in English that help enlarge its lexis. Those generally considered to be most productive (derivation and compounding) are not in the focus of this paper. Rather, the paper provides an outline of a number of various available means of getting new meanings of words in established forms in English, focusing on extension, narrowing, bifurcation and back-formation.

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2. THEORETICAL PRELIMINARIES

Word formation is nowadays perceived to be such a confused area of study that it would not be possible to write an uncontroversial introduction to the subject. Bauer (1983) recognises that much of the confusion in word formation studies is terminological, in addition to an increasingly high interest the word formation is gaining amongst theoretical linguists particularly because of the light it throws on other aspects of language. He further acknowledges that, given the confusion that reigns at the moment, it should be borne in mind that virtually any theoretical statement about word formation is controversial.

The ways in which new words are formed, and the factors which govern their acceptance in the language, are generally taken very much for granted by the average speaker. To understand a word, it is not necessary to be aware of how it is constructed, or whether it is simple or complex, that is, whether or not it can be broken down into two or more constituents. Human beings are only able to use a word which they find new if they learn the new word together with objects or concepts it denotes. On the other hand, when new coinages are met, like *shutup-ness*, *talkathon* etc, our reactions to them may not be readily explained. We may find them acceptable and in line with our own feelings about how words should be built up, or they may seem in some way contrary to the rules.

According to Crystal (2002), English vocabulary has a “remarkable range, flexibility, and adaptability”. Owing to the periods of contact with foreign languages and its readiness to coin new words out of old elements, English seems to have far more words in its core vocabulary than other languages. For example, alongside *kingly* (from Anglo-Saxon) we find *royal* (from French) and *regal* (from Latin).

2.1 ON WORD-FORMATION IN ENGLISH

According to Bauer (1983: 1), there is no single “theory of word-formation”.

“Interest in word-formation has probably always gone hand-in-hand with interest in language in general, and there are scattered comments and works on the subject of word-formation from the time of Panini, who provided a detailed description of Sanskrit word-formation, right up to the present day.”

Questions that still cause difficulties have been asked by scholars for centuries. Furthermore, word-formation has been considered by various linguists from different points of view: from a phonological point of view (Halle, 1973); from a syntactic point of view (Jackendoff, 1975); and from a semantic point of view (Leech, 1974; Lyons, 1977).

According to Bauer, the study of word-formation is currently in a state of flux. There appears to be no doctrine on the subject which attracts many new researchers precisely because of the nature of word-formation.

Bauer (1983: 30) gives the following definition of the term *word-formation*:

“Word-formation can be defined as the production of complex forms. ‘Complex’ is used by other scholars to mean ‘produced by derivation’. Thus, word-formation can be divided, in the first instance, into derivation and compounding (although there are other categories which do not fit neatly under either of these headings.”

In short, word-formation can be understood to mean a collection of different processes – compounding, affixation, back-formation, blending, and so on, about which, as a whole, it is slightly difficult to make a general statement.

Adams (1973: 7) agrees that there is a failure of general linguists to provide a consistent definition of the word across languages, which has shown that it can only be defined with respect to a particular language.

Both Adams (1973: 7) and Bauer (1983: 8) agree that, regardless of the difficulties the notion *word* may carry, it has a certain psychological validity, and that there are good reasons for operating with such a notion. To illustrate this, they claim that speakers of a language, even illiterate speakers, (must) have a feeling for what is, or is not, a word. Sapir (1921: 34) reports that speakers of languages that have never been written have no difficulty whatsoever in determining words, although they have some difficulty in learning to break up a word into its constituent sounds. Repeating the sentences, “word for word”, therefore, is not a problem for such speakers. As an exception to this rule, there are words in English that divide English speakers into those who claim that they should write *all right* as opposed to those who opt for *alright*, but in general terms this holds true. Bauer concludes that, obviously, the rules that must be established for forming words depend on what counts as a word in any given language. There are words that are formed by rules of syntax, whereas formation of words may be considered as being explained not by syntactic rules but by rules that depend on syntactic factors. ‘Word-formation’ is a traditional label, and one which is useful, but it does not generally cover all possible ways of forming everything that can be called a ‘word’.

2.2 LEXICALISATION

A lexeme goes through several stages a lexeme, ranging from the so-called nonce formation, through institutionalisation to, finally, lexicalisation. On its path, a lexeme starts as a new complex word-form designed by a speaker simply to fulfil some immediate need, the next stage emerging when the nonce formation starts to be accepted by other speakers as a known lexical item. At this stage it is typical, as Bauer argues (1983: 48),

“...that the potential ambiguity is ignored, and only some of the possible meanings of the form are sued (sometimes only one). Thus, for example, there is nothing in the form *telephone box* to prevent it from meaning a box shaped like a telephone, a box which is located at/by a telephone, a box which functions as a telephone, and so on.”

As it appears, it is only because the item is familiar that the speaker-listener knows that it is synonymous with *telephone kiosk*, in the usual meaning of *telephone kiosk* (institutionalisation).

Bauer (1983: 48) concludes that the lexeme enters its final stage when it takes on a form which it could not have if it had arisen by the application of productive rules. This is the stage when the lexeme is lexicalised.

2.3 MORPHOLOGY AND THE LEXICON

Both morphology and the lexicon are considered equally important ways of providing words in a language. Aronoff and Anshen (1998) provide arguments to substantiate this claim:

“In fact, the two systems, i.e. morphology and the lexicon, do have a great a great deal to do with one another, for two simple reasons...they both provide words, and...they are independent...”

The morphology of a language, they argue, as part of grammar, trades in structural matters, dealing primarily with the internal make-up of the potential complex words of a language. The lexicon, on the other hand, of any language, is a simple listing of items that exist in that language – the items that a speaker must know, as they are arbitrary signs, hence, unpredictable in a particular way.

According to Aronoff and Anshen (1998), there is an apparent rivalry between the two, as with any two entities sharing a task. The rivalry obviously plays an important role within the larger system of the language as it gives added value to the total number of words in a language, regardless of the fact that words may be provided by the morphological rules, including the morphologically well-formed complex potential words, or merely as words listed within the lexicon of a language by being simply stored into an individual’s mental lexicon. According to Aronoff and Anshen, the interaction between morphology, being the system that creates regular words, and the lexicon, the system that stores irregular words, can only be observed where both are capable of being invoked.

A good illustration of the interaction includes a simple case of the plural noun in English. It is generally known that some plural forms come from the lexicon, whereas some originate from the morphology. In case of the former, plurals are said to be originating from the lexicon simply on account on their irregularity, and stored accordingly into the individual’s mental lexicon, such as *men* or *mice*. The latter, on the other hand, encompasses plural forms coming from the morphology in case they are regular, like *cups*. A question arises here – how do speakers know not to say *mans* but *men*? Why is it the case that if a word has an irregular plural stored in the lexicon, there is no regular plural, the one coming from the morphology? There must be a blocking power that prevents the morphology from producing a regular plural just in case an irregular plural for the same word is in

the lexicon already. The only possible conclusion we can arrive at here is that both lexicon and morphology appear to interact in making sure that only one form will be used.

Aronoff and Anshen (1998) explain this phenomenon by the centuries-long linguistic tradition of languages having the tendency of avoiding synonyms. They argue that most speakers will use a word from their lexicon (*men*) rather than resort to morphological rules of producing a new word with the same meaning – the phenomenon called *blocking*, i.e. “the non-occurrence of one form due to the simple existence of another” (Aronoff 1976: 43).

In conclusion, morphology is clearly distinct from the lexicon, and depends on it, bearing in mind that the production of morphologically complex words is done largely by applying morphological rules to normally lexical entries which are stored in a speaker’s mental lexicon.

DISCUSSION AND ANALYSIS

The following presents various ways to use established forms of the language to express new meanings.

EXTENSION

Hudson (2000: 259) defines extension as “the widening or extending of the meaning of a word”. Examples (Hudson) include:

red ‘a person with socialist political/economic beliefs’, as in ‘a red was elected mayor’. The word *red* came to be associated with socialism because of the use of the colour red in flags and banners of the International Socialist movement.

silverware ‘table utensils: knives, forks, etc.’, whether made of silver or not. Manufacturers must use the word ‘tableware’, so as not to seem to lie about their product, which are usually stainless steel, but in ordinary usage many of us just say ‘silverware’, sometimes even for the plastic versions!

Holiday ‘customary day of no work’, or, in BrE, ‘vacation’ (=‘days of no work’). The first part of *holiday* comes from ‘holy’. On many ‘holy days’ there is or was traditionally no work, and the term was extended to mean both religious and non-religious work-less days.

EXTENSION AS METAPHOR

Hudson (2000: 259) argues that, as in zero-derivation, the first occasions of extensions of meaning are metaphors, in which a word or phrase sharing the qualities of meaning with another replaces the other. When repeatedly used, the extended usage may become ordinary, resulting in the loss of the novelty on the part of the metaphors, as well as of their metaphoric origin (understand < under - stand, holiday < holy – day).

Hudson (2000: 259) gives an illustration of a common sort of extension which

“involves taking the name of a popular first or early version of a new product and extending its name to all subsequent such products, as in *Xerox* ‘photo-copy’, *Kleenex* ‘tissue paper’, *Band-aid* ‘adhesive medical dressing’, etc.”

He argues that these extensions may emerge as clippings of phrases: the phrase *Xerox (photo)copier*, for example, is first clipped as *Xerox*, and then the single word is extended to other copiers.

However, if metaphors and metonymies are defined as they are in cognitive linguistics (see 2.4.8), as in Kövecses (2002), one of the differences lies in the number of domains involved. Then Hudson is wrong in assuming that these are cases of metaphoric extensions: these are metonymies.

3.2 NARROWING

Narrowing is the opposite of extension: the narrowing of the meaning of a word. Several English examples (Hudson) include:

band ‘a group of persons, especially one which performs music’. The narrowed meaning of *band* is the latter sense. The earlier broader meaning is found in phrases such as ‘Robin (Hood) and his merry band’ and ‘a band of outlaws’, both of which now have an archaic ring, whereas the narrower meaning, in phrases like ‘a band concert’ and ‘the Bob Seeger band’, seems completely ordinary. The meaning ‘group of persons’ has diminished (replaced by *group*, *party*, in phrases like ‘a party of five’, and ‘in colloquial language, *bunch*, ‘a bunch of kids’), except in the narrowed sense of ‘group of musicians’. Naturally people have begun to think of *band* as concerning particularly this narrowed meaning.

building ‘something built to enclose and cover a large space’. The verb *build* clearly suggests the earlier broader meaning of *building*, ‘a result or occasion of building’, as *fishing* very broadly concerns the verb *fish* and working the verb *work*, etc. The meaning ‘result (or product) of an act of building’ was narrowed to concern only a particular sort of product, excluding cases like fences and dams; even the Eiffel Tower seems not to be a ‘building’ in the current narrowed sense of this word.

doctor ‘one holding a doctorate degree in medicine or other field’. The tendency of ordinary language is for word to mean specifically one holding a doctorate in medicine (MD). Thus if a person faints at a college faculty

meeting and the cry ‘Get a doctor!’ is heard, all the doctors of chemistry, education, law, etc. do not rush to offer assistance. The narrowed sense has not become widespread enough, however, to replace the word *physician* in the ‘yellow pages’ of telephone directories.

ELEVATION, PEJORATION, AND LATERAL SHIFTS

Some sub-types of narrowing or extension include elevation, pejoration and lateral shifts. According to Hudson (2000: 260), “words may be extended or narrowed to yield a more pleasant or positive meaning, or to yield a more unpleasant or negative one”. Change in the former direction is termed elevation. Some examples of elevation in English include (Hudson):

brave, which earlier meant ‘bright, gaudy’ (as in Shakespeare’s phrase ‘brave new world’)

prize, which earlier meant ‘price’

great, which now tends to mean ‘wonderful’, recently was more likely to mean just ‘large, important’.

Pejoration, on the other hand, is the term used to mark the opposite shift of meaning towards a more unpleasant or negative meaning. Several English examples of pejoration include (Hudson):

mean, which nowadays tends to mean ‘malicious, selfish’, but earlier was more likely to mean ‘stingy’ or even ‘common, inferior’

idiot, which earlier simply meant ‘ignorant’

criticise, which earlier meant ‘give a critique’, but now tends to mean ‘give a negative critique’

Hudson argues that, strictly speaking, pejorations and elevations result from both extension and narrowing together as there appears to be extension of meaning to the more positive or negative sense followed by narrowing to just that particular sense. Another result of extension plus narrowing, Hudson argues, is a lateral shift of meaning, where there are no visible elements of elevation and pejoration. Examples include (Hudson):

harvest, which originally meant ‘autumn’, but was extended to mean also the autumn activity of ‘bringing in crops’ and was then narrowed to mean just this. On the other hand, as it will be seen (section 2.4.8), one could argue that this resembles a chain of metonymic changes.

trade, originally meaning ‘track’ (as noun form of the verb *tread*), was extended also to mean ‘path’ and then ‘path or means of livelihood’; later it was narrowed to mean just this.

bead, earlier spelt *bede*, meant ‘prayer’, and took on its present meaning with the close association of prayers and beads, as in rosary beads; the meaning ‘prayer’ was taken over by *prayer*, at first a noun form of the verb meaning ‘beg, implore’. This may be considered yet another classic example of metonymy that Hudson fails to acknowledge.

EUPHEMISM

Euphemism is the sort of extension of ordinary words and phrases that expresses unpleasant or embarrassing ideas. The form is often indirect and therefore the unpleasantness of meaning is diminished. The words extended in such a way are known as euphemisms. Some examples include (Hudson) and their definitions (Collins):

bathroom (often used in AmE even for rooms without bathing facilities) ‘a room containing a bath or shower and usually a washbasin and lavatory; in AmE, another name for lavatory’

intercourse, ‘communication or exchange between individuals; mutual dealings’. Here mostly refers to a sexual relationship.

undertaker, ‘a person whose profession is the preparation of the dead for burial or cremation and the management of funerals’

dentures, ‘a partial or full set of artificial teeth’

Sources of euphemism may be found in acronyms, clippings, derivations, and compounds, as in *WC*, *bra*, *preowned*, and *pass away*, respectively. It is worth noting that in examples like *intercourse* and *undertaker*, the tendency for euphemistic extensions to become narrowed and lose their broader sense – for example, mentioning ‘intercourse between nations’ in an economics lecture tends to distract the audience.

3.5 BIFURCATION

In bifurcation a word or morpheme develops two forms and its meaning is eventually divided between the two forms. These are cases of narrowing in which often the original, broader, meaning survives in one of the forms. The two forms of words which may result in bifurcation come in three types: morphological, phonological, and orthographic (all types illustrated below, Hudson):

hanged and *hung* are variant morphological forms of the past tense of *hang*. By bifurcation, *hanged* tends to be favoured in the meaning ‘executed by hanging’ and *hung* is favoured for other past tense senses of *hang*. The regular form *hanged* results from analogical change, on the model of the majority of regular verbs that form their past tense with *-(e)d*; the form of the analogy yielding *hanged* is ‘*hang* is to X as *bang* is to *banged*’.

some has two pronunciations each with a different meaning. Without stress, *some* has become a plural indefinite article, the plural equivalent of *a/an*, as in ‘I bought /sʌm/ potatoes’ (the meaning of the sentence does not

change significantly if *some* is omitted). With stress, *some* has the meaning ‘certain (not all)’, as in ‘I like /sɪm/ potatoes (but not all)’ (here the meaning is changed if *some* is omitted).

metal ‘class of chemical elements’ and the differently spelt (identically pronounced) *mettle* ‘capability’, in the archaic phrase ‘test/try one’s mettle’, both derive from Latin *metall(um)* ‘metal’. With the narrowing of meaning of *mettle*, these have been sorted into the two meanings.

In general, bifurcations are not produced on purpose. Rather, they just happen, over time, “as the product of unconscious application of a general principle of language learning and language change known as the one form/one meaning principle: Let one form have one meaning and one meaning one form.” (Hudson, 2000: 263). Bifurcations fulfil the principle by yielding two meanings for two forms.

3.6. BACKFORMATION

Wrong cutting/parsing²¹⁶ may result in a slightly new form for an old meaning, as in *apron* from *napron* and *nuncle* for *uncle*. However, wrong cutting may also result in a new meaning, in which case this is called backformation. Here are some examples (Hudson):

televise results from falsely analysing *television* as *televise* plus the suffix *-ion*. In fact, *television* comes from *tele* plus the noun *vision*. The false part *televise-* was taken to be the stem of a verb *televise*, a useful verb, which, as a result of this novel analysis, now actually exists. The logic of the word backformation to describe such a case is apparent here: instead of the word *television* being formed ‘forward’ from pre-existent *tele* + *vision*, previously non-existent *televise* is formed ‘back’, from *television*.

burger results from falsely analysing *hamburger* as *ham* + *burger* instead of historical *hamburg* + *er*. The original word *hamburger* was first applied to a sandwich at the 1891 St Louis World’s Fair, where it meant ‘of the type of the city of Hamburg (Germany)’. People sensibly understood the first part, *ham*, to be the meat of the sandwich (even though it was actually beef), which left *-burger* to refer to the type of sandwich. *Burger* being a useful morpheme, it survived and spread, and now we have *fishburgers*, *cheeseburgers*, etc.

-athon, as in *eatathon* and *talkathon*, results from falsely analysing *marathon* ‘long distance foot race’ as *mar* + *athon*. *Marathon* already is an extension of the name of the Greek plain of Marathon, 20 or so miles from Athens, from which a messenger ran to announce the Athenian victory at the Battle of Marathon in 490/491 BC. Some creative person has lately imagined *-athon* of *marathon* to be a suffix having to do with any long-lasting event, so now we have *walkathons*, *talkathons*, *kissathons*, etc.

Other recently much noted backformed suffixes include *-gate* ‘scandal’ and *-oholic* ‘addiction to’. In the case of the former, the source is Watergate, the name of the building where the burglary that started the political scandal took place. *Water* obviously being a word, Hudson argues (2000: 264), “someone creatively but surely with intentional cleverness metanalysed *-gate* to be a suffix, and so now we have *Irangate*, *Koreagate*, etc.”. As for the latter suffix, it is backformed from *alcoholic*, as if *alc-* and not *alcohol* meant ‘alcohol’. The new suffix is attached to words, as in *workaholic* and *chocoholic*.

Bauer (1983: 230) claims that the great majority of back-formations in English are actually verbs. He quotes Pennanen and his figure of 87%, and the explanation that “verbs have a larger field of derivatives around them” than most other form classes, clearly making more possible sources for a back-formation which is a verb. Bauer further claims that “some authorities” (Marchand, 1969) prefer the term ‘back-derivation’ to ‘back-formation’. However, Bauer argues, it is not necessarily always the case that a derivational process is that which is reversed in back-formation. To illustrate his claims, Bauer gives three examples here (1983: 231): i. a classic example of the word *pea*, a back-formation from an earlier singular (uncountable) form *pease*, which was perceived as plural, ii. *cherry*, which is a back-formation from the French *cerise*, again with the final /z/ perceived as a plural marker, and iii. the form *alm* from *alms*, a recent example.

Following is what Bauer (1983: 231) gives as the usual description of the process of back-formation: “a rule of word-formation is reversed” (Adams, 1973: 105; Aronoff, 1976: 27). Bauer believes that this is perhaps slightly misleading and therefore gives a formula for the entire process, using examples of *editor* and *exhibitor*, as follows:

verb	PLUS	-or	→ noun	
<i>exhibit</i>			<i>exhibitor</i>	
verb			← noun	MINUS -or
<i>edit</i>			<i>editor</i>	

Or in more general terms, where *X* and *Y* are form classes of lexemes and *A* is a particular suffix:

²¹⁶Wrong cutting/parsing is not discussed in this paper.

Formation:	$X + A \rightarrow Y$
Back-formation:	$Y - A \rightarrow X$

Some recent examples (Bauer, 1983: 231) include *paramedic*<*paramedical*, *surreal*<*surrealist*, *lase*<*laser* etc.

4. CONCLUSION

The preceding sections of this paper provide an outline of particular available means for production of new meanings in established forms of words in the English language. In order to present the various, generally considered slightly less productive word formation processes (compared to derivation and compounding), it was prerequisite to provide some definitions and generalisations.

As for the particular processes of word formation outlined in the paper, it can be said that extension, narrowing, bifurcation and back-formation most certainly stand as important sources of obtaining new meanings in already established forms of words, even though they are somewhat less productive than derivation and compounding, but still present in everyday English. Not only is each particular type discussed in this paper present in casual speech, rather it is employed quite frequently.

Overall, it can be concluded that there is definitely reason for studying language and its lexis, as Chomsky puts it (1976: 4), “it is tempting to regard language, in the traditional phrase, as a ‘mirror of mind’”, simply because language with its lexis is a never-ending process, governed by principles that are universal by biological necessity.

The wide range of mechanisms that English offers for the production of new words, which have been presented in the paper, as well as the numerous corresponding examples, have shown what qualifies English as a language medium which is universally intelligible. English thus continues to occupy the position of the world’s first language.

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