

1. Introduction

In English morphology a distinction is sometimes made between major and minor word-formation processes. The criteria for assigning word-formation processes to the first or the second group are rarely specified, if at all. It is fairly safe to assume that productivity will be seen as one of the primary ones, though it is not without problems just as the concept of productivity. In purely quantitative terms, the sheer numbers of acronyms in modern English would certainly argue for acronymization as a good candidate for a major rather than minor word-formation process, as it is commonly classified. Also, the importance of a word-formation process may derive from other reasons than purely quantitative. Back-formation regarded as a minor process is a good case in point. Starting with a review of the most influential approaches to this process, this paper attempts to provide a summarising description and analysis of English back-formation in the latest period of its development – the 20th and the beginning of the 21st century – and show its potential as a source of new words.

Back-formation (also called back-derivation, retrograde derivation or deaffixation, hereafter referred to as BF) is described in many sources as, e.g. “the coining of a new word by taking an existing word and forming from it a morphologically more elementary word. It is usually a matter of deleting an affix” (Huddleston, Pullum, 2003, 1637). The prevailing type of affix which is subtracted in this process, is the suffix; there are few examples involving a prefix (*disabled* > *abled*, *uncouth* > *couth*). Scholars usually describe BF as a process based on analogy and wrong application of word-formation rules by common speakers. As far as the resulting part of speech is concerned, the most frequent outcome of BF in English is verbs, formed by desuffixation of nouns, a procedure reverse to the suffixation of verbs and derivation of nouns. The source words are often words borrowed from another language, mainly from French or Latin. One of the most frequently adduced examples is the pair *editor* > *edit*, where the verb has been formed from the noun by BF – subtraction of the supposed suffix, analogically according to the similar type of words formed by regular suffixation (e.g. *credit* > *creditor*, *act* > *actor*). Apart from this oft-mentioned type, another, fairly frequent result of BF is compound verbs (derived more often from native bases), where the suffix is also subtracted (*house-keeper* > *house-keep*). In modern English, there are some words which

have been back-formed relatively recently (e.g. *skirt-chaser* > *skirt-chase* 1981; *snowboarding* > *snowboard* 1985; *comedian* > *comede* 1989); therefore we can assume that BF in English is still productive.

2. English BF in the literature

In the recent literature there are two authors whose approach to BF has substantially influenced the treatment of and attitudes towards it in the writings of generations of morphologists to come. They are Marchand (1960, 1969) and Penanen (1966).

Marchand's (1960, 1969) *The Categories and Types of Present-Day English Word-Formation* based on a detailed analysis of the lexis in the first edition of the OED holds a special place in the history of English word-formation. He sees the process as one of diachronic relevance only and emphasizes the importance of semantic relation between the source and the resulting item. Using content analysis to establish the derivational basis and the derivative from a synchronic point of view, Marchand concluded that the term BF had been used arbitrarily for two distinct groups of extracted words: those which are secondary from the historical point of view (*peddle*, *scavenge*, *sculpt*, etc.) but synchronically primary (with *peddler*, *scavenger*, *sculptor*, etc., being derived to all intents and purposes); and those (*televise*, *laze*, *burglar*, etc.) which are both historically and synchronically secondary (with *television*, *lazy*, *burglar*, etc., being the derivational basis) and also more numerous.

Unlike Marchand, who wrote five pages on BF, Esko V. Penanen devoted a whole monograph to it. He gave a profound description and analysis of BF in his work *Contributions to the study of back-formation in English* (Tampere 1966), and has returned to the subject several times (e.g. 1975). In his 1966 study, he approaches the phenomenon from both diachronic and synchronic points of view. Penanen defines BF in the following way: "Back-formation or retrograde derivation is a kind of inverted or reverse derivation. Normally, derivation means the formation of new words from existing ones by means of affixes (prefixes, infixes, or suffixes). Back-formation works in the opposite direction, i.e. from what is, or looks like, or is taken for a derived form, backwards to the 'root', which does not really exist" (1966, 9).

He follows the rise and development of BF over time, from the 13th century till the early 1960s and at the same time he identifies and defines the productive types of BF and the role of BF in English word-formation today.

One of the most important results of Penanen's research is his typological system of back-formed words: he distinguishes six categories according to the part of speech of the source

word and the resulting word. Both *simplicia* (simple derivatives and monomorphemic words) and *composita* are included. The classification is very clear and has become the methodological basis of the present study for presenting the analysis of the 20th century's material.

The six types are as follows (1966, 44-45):

- Type I. A verb is back-formed from what is believed to be or really is an agent noun (*nomen agentis*) or an instrument noun.
- Type II. A verb is back-formed from a real or supposed action noun (*nomen actionis*), usually denoting the abstract for the verb.
- Type III. A verb is back-formed from an adjectival word which is taken to be a derivative from the verb, e.g. present or past participle.
- Type IV. A substantive is back-formed from an adjective taken to be a derivative from it.
- Type V. An adjective is back-formed from an abstract substantive, adverb or another adjective, whose basic word it is taken to be.
- Type VI. A "primary" substantive is back-formed from what is taken to be its derivative.

Together with this transparent typology, other Pennanen's findings and principles were used as the point of departure in the present research or confirmed by it: the importance of the semantic element was taken into consideration during the collecting of relevant units; the principle of analogy played an important role especially in the research of neologisms and their comparison with the existing, older units; the extensive involvement of compound words led to the inclusion of structural description of the newly-formed units; in addition, the stylistic and regional evaluation of new BFs was partly inspired by Pennanen's conclusion about the occurrence of this process on various levels of language and not only in British English but also in other parts of the world than the United Kingdom.

Apart from Marchand and Pennanen, several other authors have dealt with BF, focusing their attention on the most frequent types and commenting on special nature of this phenomenon. The most frequent features that most of the various approaches to BF discuss are the diachronic or synchronic relevance of the phenomenon (e.g. Aronoff, 1976; Kastovsky, 2006; Bauer, 1983), its analogical nature (e.g. Plag, 2003), the (in)ability of users to recognize back-formed words in everyday language, (e.g. Lieber, 2009), stylistic value of BFs (e.g. Katamba, 1994), re-analysis of the source words (e.g. Adams, 1973), the increasing share of verbal compounds resulting from the process (e.g. Plag, 2003), and the tendency to admit a new pattern in English – verb compounding (e.g. Kastovsky, 2006).

3. Back-formation in the 20th and the early 21st century

The research presented here is meant as a continuation of Pennanen's classical work; its main objective is to complete what his study could not: the analysis of material from the period partially covered by him (from the beginning of the 20th century to the early 1960s), and especially the period until today. In addition, it investigates the most recent vocabulary reflecting BF and suggests the main tendencies of this process in the future.

The description and analysis of the situation over the whole of the 20th century till the present time is based on the total sample of 768 items. It consists of five smaller samples:

- a sample of 225 back-formations (BFs) collected by Pennanen in his study (1966) for the first half of the 20th century (1900 - the early 1960s)
- an additional sample of 246 BFs collected and analyzed in the present follow-up research of the same period
- a sample of 229 most recent BFs formed during the latest (second) period, i.e. from the 1960s till now
- a sample of 8 items of the second period which have been identified as BFs although not explicitly so labelled in the dictionaries or other sources, being recognized by means of the method used here, which is a combination of Pennanen's original typology and rules on the one hand and additional types and characteristics resulting from the present research on the other
- a sample of 60 hypothetical BFs – items not attested in the dictionaries but having all the makings of future BFs formed from neologisms by this word-formation process. Using contemporary live informal communication on the Internet as feedback it was possible to establish that out of the 60 hypothetical words 25 have been actually used by English speakers / writers, an indication that the applied method of description has a positive predictive value as well

In the research the subject matter was approached from both diachronic and synchronic points of view. A number of theoretical sources were studied and a set of general linguistic dictionaries (1995-2009) and works on neologisms were examined so that a sufficient amount of relevant material could be collected. In the selected dictionaries, words labelled explicitly as BFs were primarily looked for (a sign of consensus on their status). In that stage of the research, the diachronic approach was inevitable: the dates of occurrence of the source words and the resulting BFs had to be compared. However, not always was the sought-for form entered as a headword; sometimes it was listed as one of its (back-)derivatives. With some

items, especially the newer ones, and with the most recent neologisms, the identification was rather more difficult. In such cases, the transparent BF typology, the author's linguistic knowledge and sometimes even linguistic intuition were the best instruments that helped to decide their status.

The collected material is classified into nine types and described according to several aspects (the part of speech of both the BF and the source item, their complexity, specific formal and semantic features, stylistic value). This nine-class BF typology derives from the typology established by Pennanen (1966), whose classical study is the methodological point of departure of the present research. However, Pennanen's original typology including six basic types of BFs (see above) was extended in the present study by three more types: prefix BFs, inflectional BFs and a class of adjectives formed from agent nouns.

As far as the prefix BFs and inflectional BFs are concerned, Pennanen does not consider these as relevant items because, in his opinion, the change that occurs here does not involve the internal form of the word: in the case of words formed by subtraction of the prefix he speaks of mere shortening as the resulting word is on the same level as the source word (they have the same internal form); in the case of inflectional BFs he says that only one element (number) of the internal form is affected, while the semantic structure remains intact. In the present study, however, both these types have been included in the material and added to the original typology as Types VII and VIII. They are generally referred to as examples of BF in the literature by various authors (e.g. Bauer, 1983, Katamba, 2006) and they certainly represent two specific types of this word-formation process regardless of how extensive the change of the source word is. The result is always a new word that either had not existed or was not used before.

Among the prefix BFs of the recent period, antonymy is the most frequent relation between the source and the resulting word. An example is *unflappable* (adj.) > *flappable* (adj., "easily upset or confused, esp. under stress"). Hyponymy is also represented, namely by two items: *patriate* ("to transfer (legislation) to the authority of an autonomous country from its previous mother country") has a more specific meaning than *repatriate*, referring to legislation only; on the other hand, the meaning of *pheresis* ("removal of whole blood from a patient or donor") is more general than *plasmapheresis*, as the latter refers only to one element of blood – plasma. The pair *urb* < *suburb* can be described as complementaries; they are two adjacent areas, the former the area of the city and the latter the area outside the city but related to it. The relation between *plore* and *explore* is an interesting, unusual case of a noun resulting from a verb in this category. Based on the meaning of the two items, a possible

semantic relation can be the relation of a process and its result. However, this does not fully cover the fact that a *plore* is not a static exhibit to be looked at in the museum but active demonstration of the process of exploring. Ayto (1990) explains the meaning of *plore* in the following manner: “They (*plores*) don’t just sit there waiting to be looked at, like conventional museum exhibits. They actually work, and in many cases the visitors can, and are encouraged to, operate them” (1990, 247). Prefix BFs are represented by various parts of speech – nouns, adjectives and verbs. They often belong to the technical terminology.

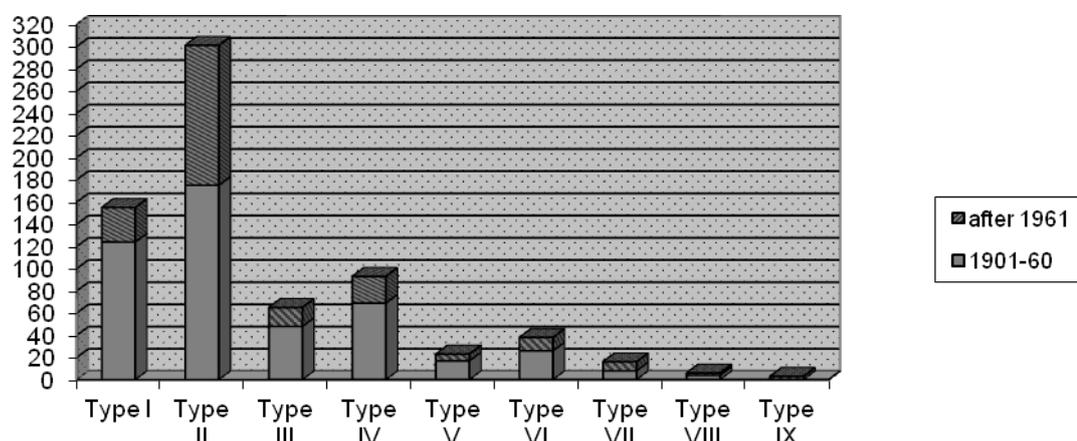
Inflectional BFs in the material result from the subtraction of wrongly interpreted plural suffixes. They are morphologically complex and are mostly technical terms in computing: e.g. *gigaflops* (noun, from *giga-* + acronym from *floating-point operations per second*) > *gigaflop*, *-s* being taken as plural ending; “a unit of computing speed”.

In addition, based on the present research, Pennanen’s original typology has been extended by one more type of BFs, namely adjectives from agent nouns. The category is small but there have been several factors that allow considering it a new type. Firstly, one item of this type was found for the first period: Random House Dictionary introduces the agent noun *paratrooper* as the source word for the adjective *paratroop*. Secondly, some other relevant items are found in the material of the second half of the 20th century and share some common features as a class (mainly grammatical and stylistic): e.g., *do-gooder* > *do-good* (“of or befitting a *do-gooder* - well-intentioned but naive and often ineffectual social or political reformer”; disparaging sense); *teenybopper* > *teenybop* (“of, pertaining to, or consisting of *teeny-boppers* - girls in their teens or younger, esp. ones who are fans of pop music and follow the latest fashions”; colloquial). Also, another example of this type has been generated as one of the potential BFs from neologisms and subsequently confirmed as existing in informal conversation: *cruciverbalist* > *cruciverbal* (“related to crosswords, e.g. *cruciverbal arrangement, style*”). As a result, this category is recognized here a separate class and is referred to as Type IX.

4. Results and major findings

The first half of the 20th century was extremely productive in terms of BF. In fact it can be seen as the most productive period so far. The sample of items from the latest period (from the 1960s onwards) is much smaller, though if truth be told it is not strictly speaking objective to compare the productivity of the most recent period with that of the previous ones. The vocabulary of the older period is more stable and recorded more completely; some later additions in OED4 (2009), for example, formed in the first half of the 20th century, were made

as late as the 1990s or the beginning of the 21st century. In fact, the sample of the latest period forms less than one third of the material of the whole 20th century (229 out of 708). At the same time, however, we have to realize that the original sample of BFs of the first half of the 20th century collected and described by Pennanen amounted to 225 words, which is almost the same size as that of the present sample for the second period (229). The high number of BFs dating from the first period (471) was actually reached by counting in the additional sample (246 items) for the same period collected at present. Seen from this perspective (the same as was available to Penannen at the time of his analysis), we may regard the productivity of back-formation as remaining on the same level as it was in the first half of the 20th century.



Representation of individual types over the whole 20th century, indicating the shares of the 1st and the 2nd period.

As can be seen in the above graph, the most productive process within BF is the formation of verbs from action nouns (Type II): it remained such over the whole 20th century and, based on the investigation among neologisms, it can be concluded that this tendency shows signs of becoming even stronger in the future. In fact, we can speak of a rather dramatic growth of BFs deriving from action nouns at present, compared to the first period (from 37 % in the first period to 55 % in the second). Typically, the verbs formed within this type are generally definable as “to do the action denoted by the action noun”, e.g. *enculturate* (“to modify or condition by *enculturation*”), or *gentrify* (“to attempt or accomplish the *gentrification* of”); in other words, almost all the source nouns refer to the action. There are a few exceptions, e.g. *bibliography*, *concordance* or *one-handedness*, referring to a state or result of a process rather than to an action: *bibliography* (> *bibliograph*) refers to “the systematic description and history of books, their authorship, printing, publication, editions, etc.”; and, secondly, to “a

list of the books of a particular author, printer, or country, or of those dealing with any particular theme; the literature of a subject”; *concordance* (> *concord*) is “an alphabetical arrangement of the principal words contained in a book, with citations of the passages in which they occur”. *One-handedness* (> *one-hand*)) is special in that the source word refers to a state: “the state of being one-handed”, however, as a result the process of BF produces an action verb meaning “to operate with one hand, to catch in one hand, etc.”, which is clear from the OED4 quotations, e.g.: “Jones stretched an arm and one-handed it (the ball), and kept it.”

Formation of verbs from agent nouns (Type I) was fairly frequent in the first half of the last century; it made up 26 % of all BFs, but its share has decreased significantly - to a mere 14 % in the second half, some of the latest examples being: *comede* (“to be a *comedian*, to tell jokes”), *deal* (“to act as a *dealer*, to sell”), *topline* (“to appear as the principal performer, the *topliner*”). BF of verbs from adjectives (Type III) almost disappeared during the 20th century and the estimated tendency for the future is not very favourable either. Some examples are: *anonymize* < *anonymized* (“to make anonymous”) *silicone* < *siliconed* (“to coat, impregnate, fill, or otherwise treat with silicone”).

Adjectives can be seen as a minor source of back-formed nouns (Type IV, e.g. *flash* < *flashy*; “the quality of being flashy, glittering”), probably decreasing in productivity; their share in the sample of the second period is smaller than that of the first and they do not occur among neologisms at all.

The other types form very small shares in the whole sample.

From the research of the material from the whole century as well as the investigation of neologisms it follows that there is an increase in the formation of compounds in this word-formation process and it will probably continue in the future. Compound BFs represent 55 % of all items in the material of the second period against 52 % in the first period; similarly they form a major portion among the suggested potential BFs that might be derived from neologisms as well as a large part of the confirmed ones in the present research. The following examples, most frequently verbs, come from the latest period (since 1985): *word-process* < *word processing* (“to edit, produce, etc. by electronic means, using a word processor”), *carjack* < *car-jacking* (“to steal or commandeer an occupied car by threatening the driver with violence”), *drop-ship* < *drop-shipment* (“to ship (goods) from a manufacturer or wholesaler directly to a customer instead of to the retailer who took the order”).

In terms of the whole century, the highest share is represented by compound verbs back-formed from action nouns (41 %); the total number of compound verbs of all three types (I-

III) is 304, which is 82 % of all back-formed compounds. Based on this high share within BF, it can be confirmed that BF is one of the most important ways in which compound verbs are formed.

The most frequent subtracted suffixes are *-ing*, *-ion/-ation* and *-er*, all of them being involved mainly in the formation of verbs. The suffix *-er*, has lost its first position in the overall survey; it used to occur in almost half of the source words in the first period. It has been outnumbered by the suffixes of source action nouns, of course as a result of the steep growth in that category. The suffix *-ing* has become the most frequent suffix subtracted in the process of BF at present, and according to its high frequency among unconfirmed as well as potential and confirmed items it is likely to continue in this trend in the future. The involvement of another suffix, *-y*, has increased in the second period.

The resulting BFs are stylistically diverse, with unmarked items prevailing. There is a considerable portion of technical terms and learned words, and besides, many unmarked items are limited in use, tending to be close to technical terminology of a particular field (e.g. *demerge* < *demerger* in business: “to separate one or more firms from a large group”, *grit-blast* < *grit-blasting* in technology: “to use a stream of abrasive particles directed at a surface to clean it and roughen it”, etc.). About one third of the technical terms in the second period belong to various natural sciences: biochemistry, chemistry, physics, medicine, and others. But there occur also some recent terms of other areas of modern human activities, for example computing (*computer-generate* < *computer-generating*, “to create sounds or visuals with the aid of computer”) or ecology (*eutrophicate* < *eutrophication*, “to undergo *eutrophication*”).

There is a slight quantitative increase in regionally marked words, the largest share being represented by Americanisms (e.g. *front-load* < *front-loader*, “to concentrate a load at the front of a vehicle”; *Tase* < *Taser*, to use a Taser (a weapon)). This tendency has been kept up from the first period. There are few colloquial and slang words. These words are often at the same time regional expressions, e.g. the South-African verb *jackroll* < *jackroller*, “to act as a *jackroller*, i.e. one who robs a drunken or sleeping person”, is a slang word; so is the Australian noun *shonk* < *shonky*, “one engaged in irregular or illegal business activities”.

The description and analysis of the process of BF in the latest period as well as the investigation of neologisms have shown that prefix BFs, which generally represent a minor class, continue to be formed. On the other hand, the type described as inflectional BFs appears to be in continuing decline as the sources seem to be exhausted. However, new computer technologies may be able to tap new sources. The class of adjectives back-formed from agent

nouns is a new type that might continue in occurrence, but this prognosis needs a longer time to be confirmed.

The picture of the most recent situation in the area of back-formation would not be complete without research among neologisms. There have been found words among them which almost certainly seem to have been back-formed although such origin is not explicitly mentioned in the dictionaries or other sources. The assumption of BF at work here is based on semantic and formal features in the mutual relation between the given word and its potential source word. For example, the verb *dollarize* is presented in MW's CD only as a part of the entry of *dollarization* (n.) "the adoption of the United States dollar as a country's official national currency" (1982), without any specific definition of meaning, indicating thus that it is a derivative of the noun. This idea is furthermore supported by the fact that the verb does not occur in any of the other dictionaries used in this research, while the noun does. So the conclusion was reached that in this group of items the sequence of formation was *dollar* (n., 1782) > *dollarization* (n., 1982) > *dollarize* (v., after 1982), similarly as in *Finland* (n.) > *finlandization* (n., 1969) > *finlandize* (v., 1979), which is an attested BF in the sample from the second half of the 20th century. Altogether there have been found 8 such words; each supposed BF is supported by a comparable example of a confirmed back-formed word found in the material from the second half of the 20th century (similarly as *finlandize* supports *dollarize*).

The research has furthermore dealt with another sample of words. They are called "potential BFs", and they do not occur in any of the dictionaries used. They are only expected to be back-formed in the future from existing neologisms whose form corresponds with the existing BF source words confirmed as such in the previous research. The principles of Pennanen's typology (supplemented by the additional types in the present research) were applied again, namely to neologisms which are analogically seen as eligible to become the source words for future BFs of the existing types. In this research, the formal aspect was the most important, the decisive element being the suffix. In the investigation of neologisms, words with the BF-prone or "suspect" suffixes were selected and classified as likely candidates for one of the nine types within our typology. For example, Ayto (1990) introduces the noun *Disneyfication* (1989), "trivializing commercialization, involving the transformation of genuine events, places of true historical interest, etc. into quaint pastiches". Based on the suffix of the noun and the existence of confirmed analogical pairs (e.g. *biomagnification* > *biomagnify*), it was hypothesized that the word might belong to Type II (action noun > verb) and produce a back-formed verb *to Disneyfy* "to subject to Disneyfication". As a result of this

research, there has been created, described and analyzed a sample of 60 potential back-formed items. The aim of such an analysis is to predict what might happen in BF in the following time period and to contribute to the overall picture of the main tendencies.

As language is in constant flux, the research could not be confined to a mere statement of “what *might* happen” and it was necessary to find out what *is actually happening* now regarding the potential BFs that have been generated. So, the final step in the research on neologisms was to consult a source that is living and absolutely up to date: the Internet. By means of the Google search engine each of the 60 potential items was searched for and, as a result, it was discovered that 25 of them were actually used by speakers (or more precisely, writers), mainly in the Internet discussions or articles. Admittedly some of them may have been used ad hoc and need not be used again, but the fact that they have been formed by the language users is a good confirmation that the hypothesis was proceeding in a correct direction. Apart from *Disneyfy* mentioned above, some other examples of the suggested and then confirmed BFs are: *infotain* < *infotainment*, “to present information in an entertaining way”, *biodiverse* < *biodiversity*, “to be marked by *biodiversity* - range of distinct living species” or *radiophobe* < *radiophobia*, “a person who suffers from irrational fear of radioactivity”.

5. Conclusions

The major findings of the present research can be summarized as follows: the most productive process within BF remains the formation of verbs from action nouns; formation of verbs from agent nouns has decreased significantly; BF of verbs from adjectives has almost disappeared; adjectives can be seen as a minor source of back-formed nouns, probably decreasing in productivity; the other types of BF form very small shares in the whole sample; there is an increase in the BF of compounds, the highest share being represented by compound verbs formed from action nouns; the suffix *-ing* has become the most frequent suffix subtracted in the process of BF; the resulting BFs are stylistically diverse, with unmarked items prevailing; there is a considerable portion of technical terms and learned words; there is a slight quantitative increase in regionally marked words - these are mainly Americanisms; prefix BFs, which generally represent a minor class, continue to be formed; the type described as inflectional BFs appears to be in continuing decline; adjectives formed from agent nouns are a new type that might continue in occurrence.

Apart from the above major findings, the research has revealed several other things. Some of the BFs that Pennanen indicated as non-existent but potential at the beginning of the 20th century have come into use since that time (*job-hunt*, 1946, *teleprint*, 1971 and *skirt-chase*, 1981) and are good examples of the continuous developments in language. His prediction of the potential existence of these items was based on the same principles as the research of the present study on neologisms, which led to the suggestion of 60 potential back-formed new words and the subsequent confirmation of 25 of them (42 %) as really existing in informal communication, although they are not attested in dictionaries yet. Among the confirmed items, the absolute majority is made up of back-formed verbs (17 out of 25), of which most have been formed from action nouns. Over a half of the items in this sample are compounds; the suffix *-ing* occurs in one third of the source words. Stylistically, the confirmed items are, of course, on the level of informal, jocular, ad hoc, ironic or very tentative use of language and need not be fully accepted by all users in the future. These data are in agreement with the major findings of the research in terms of the main samples and indicate the direction of the probable future development of this process. Confirmation of such a large proportion of the suggested potential back-formations lends support to the claim that the typology and principles used in the present research are sound and functional.

At this moment it is necessary to emphasize that this research remains open. It offers further possibilities to continue in the investigation of the process of BF. As it has shown, the situation in a particular time period can look different from different vantage points in time. The survey of back-formed items of the second half of the 20th century will be definitely different in a few decades, as those items which are only potential now might become actual and others might disappear from the lexicon. The extra-linguistic reality may decisively affect the direction of this process. An example, at this moment, can be seen in the decrease of the share of agent nouns in favour of action nouns in the formation of verbs, presumably as a reaction to the growing dynamism of contemporary society.

One of the possibilities is to examine some other sources than those that have been used, e.g. those containing more technical terminology, other specialized dictionaries (e.g. slang or regional) or academic projects involving neologisms, which can provide further material and becoming the starting point for an even more comprehensive investigation of the present period. Another approach may consist in the exploration of the current vocabulary attested in dictionaries and the prediction of potential BFs from long-established items. The research could also be carried on by investigating the British National Corpus in terms of the newly

discovered BFs and by collecting data about their use in communication, e.g. their frequency, semantic fields and stylistic value, and by focusing on the best established ones.

To conclude the present research, it has confirmed that BF can be considered an analysable and productive word-formation process, which has an indisputable potential for generating new words in the future. The relatively large number of items found in the period after Pennanen's research as well as the high percentage of items confirmed in the sample of potential BFs from neologisms have shown that we can fully agree with Pennanen's claim that BF is playing a prominent role among the modern processes of English word-formation. On the other hand, if we take into consideration one of the main conclusions of the present study that from the point of quantity the productivity of BF has remained on the same level over the last century, the natural inference is that it still remains one of the minor ways of word-formation. The possible decision if this process can be still classified as minor or whether it has improved its position within the whole system of word-formation seems to be complicated by the fact that it rarely takes place deliberately and is almost never recognized by common users of language, and that there are a number of words among BFs where even linguists hesitate between two possible ways, e.g. back-formation or analogical compounding. The general tendency of speakers for easiness, transparency and comfort may be the decisive factor which will probably always keep BF in the category of less usual and minor word-formation processes.

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Naděžda Stašková: ENGLISH BACK-FORMATION IN THE 20TH AND THE EARLY 21ST CENTURY

The subject of the present study is a description and analysis of English back-formation in the 20th and the beginning of the 21st century. Investigation of an overall sample of 768 back-formed items has resulted in the following conclusions: Productivity of back-formation remains on the same level as it was in the first half of the 20th century. The most productive process is formation of verbs from action nouns. Back-formation of verbs from agent nouns has decreased, formation of verbs from adjectives almost disappeared. Adjectives can be seen as a minor source of back-formed nouns. There is a growth in involvement of compounds in this process. The most frequent subtracted suffixes are *-ing*, *-ion/-ation* and *-er*, all of them being involved in the formation of verbs. Stylistically unmarked items prevail, but they are often limited in use. Prefix back-formations continue to be formed. Inflectional back-formations seem to decline. The class of adjectives back-formed from agent nouns is a new type that might continue in occurrence. From the analysis of the material investigated, the following main conclusion has been made: Back-formation can be considered a transparent, analysable and productive word-formation process, which has an indisputable potential for generating new words in the future.

Key words: morphology, back-formation, word-formation, compound, neologism

THE MATERIAL

The material collected for the whole period (1900-2011) is listed in the following tables and is sorted out according to the nine types established in the research. Each item is followed by its source word, the year of its first occurrence, and, where relevant, by a remark on its regional or stylistic markedness. The abbreviations used are: US (American), Austr (Australian), NZ (New Zealand), South Afr (South African), infml (informal), coll (colloquial), joc (jocular), orig. (originally). The list does not present the meanings as these can be either found in the dictionaries introduced in the References or, with the most interesting items, they are commented on in the article. Altogether, there are 733 BFs, including the most recent 25 words (with the date of 2011) originally suggested as potential BFs from neologisms and later confirmed as really existing in the electronic communication.

TYPE I: verb from agent / instrument noun

1. adolese < adolescent, 1909	80. micronized < Micronizer, 1940, orig. US
2. airmark < airmarker, 1947	81. monkey-wrench < monkey wrencher, 2011
3. ank < anchor, 1926, nonce-word, joc	82. mug < mugger, after 1900, US
4. ass-lick < ass-licker 1970 slang	83. muck-rake < muck-raker, 1910, US
5. auth < author, 1936	84. mush-fake < mush-faker, after 1900, US, slang
6. baby-sit < baby-sitter, 1947	85. name-drop < name-dropper, 1960
7. baby-snatch < baby-snatcher, before 1959	86. night-herd < night-herder, 1903, US
8. back-scratch < back-scratcher, before 1959, US, slang	87. overachieve < overachiever, 1953, psychology
9. bartend < bartender, 1948, chiefly US	88. pan-handle < pan-handler, 1904, US, slang
10. bird-watch < bird-watcher, 1948	89. penny-pinch < penny pincher, 1935
11. back-seat-drive < back-seat-driver, 1955, US	90. pinch-hit < pinch-hitter, 1931, US
12. back-slap < back-slapper, after 1924, US, slang	91. pinhook < pinhooker, 1951
13. bargain-hunt < bargain-hunter, 1956	92. play-make < play-maker, 1976, chiefly US, sport
14. bar-keep < bar-keeper, after 1918	93. play-write < play-writer, after 1900, US, slang
15. beach-comb < beach-comber, 1900	94. poetast < poetaster, 1901
16. best-sell < best-seller, 1938	95. pot-hunt < pot-hunter, 1926
17. blat < blatter, 2011	96. pre-lighten < pre-lightener, 2011
18. blow-dry < blow-dryer, 1966	97. pressure-cook < pressure-cooker, 1959
19. bludge < bludgeon, 1924	98. prize-fight < prize-fighter, 1904
20. blush < blusher, 1988	99. proof-read < proof-reader, 1934
21. body-snatch < body snatcher, 1939, US, slang	100. rabble-rouse < rabble-rouser, 1959
22. book-keep < book-keeper, 1901	101. razor-slash < razor-slasher, 1958
23. bootleg < bootlegger, 1928, US	102. redbait < redbaiter, 1940, orig. US
24. bottle-wash < bottlewasher, 1935	103. rice < ricer, 1957, US
25. bus < busboy, 1952, US	104. roller-coast < roller-coaster, 1973
26. buff < buffer, 1962	105. rotavate, rotovate < Rotavator, Rotovator, 1959
27. cabinet-make < cabinet-maker, 1951	106. rototill < rototiller, 1939, orig. US
28. cake-eat < cake-eater, after 1922, US, slang	107. schlent < schlenter, 1920, South Afr, slang
29. chain-smoke < chain-smoker, 1935, slang	108. school-teach < school-teacher, after 1900
30. chauf < chauffeur, after 1921, US, slang	109. second-guess < second-guesser, 1946, chiefly US, coll
31. cheer-lead < cheer-leader, 1955	110. sedate < sedative, 1945, medicine
32. chiropract < chiropractor, 1926	111. shake-dance < shake-dancer, 1968, slang
33. city-edit < city-editor, 1950, US	112. sharecrop < sharecropper, 1937, US
34. cliff-hang < cliff-hanger, 1946, infml, US	113. shop-walk < shop-walker, 1905
35. co-drive < co-driver, 1952	114. sidewind < sidewinder, 1925-30
36. comede < comedian, 1989, infml, joc	115. skin-dive < skin-diver, 1952
37. compand < compander, 1951, telecommunications and electronics	116. skirt-chase < skirt-chaser, 1981, slang
38. copyedit < copy editor, 1950-55	117. skyscrape < skyscraper, 1947
39. copy-read < copy-reader, 1945, US	118. slave-drive < slave-driver, 1904, US, slang
40. counter-jump < counter-jumper, 1900, US, slang	119. sleep-walk < sleep-walker, 1923
41. cow-punch < cow-puncher, after 1900, US, slang	120. spelunk < spelunker, 1946, US, slang
42. curate < curator, 1909	121. spinst < spinster, after 1900, US, slang
43. daysail < day sailer, 1960-65	122. squeg < squegger, 1933, electronics
44. deal < dealer, 1988	123. steem-roll < steam-roller, 1900
	124. student-teach < student-teacher, after 1940, US
	125. tarp-hang < strap-hanger, 1912

45. dish-wash < dish-washer, 1952	126. strike-break < strike-breaker, 1961
46. dive-bomb < dive-bomber, 1944	127. summer-board < summer-boarder, 1903
47. doze < dozer, 1945	128. supply-teach < supply teacher, 1968
48. double-head < doubleheader, 1904, orig. US	129. switch-hit < switch-hitter, 1938, US, coll
49. escalate ¹ < escalator, 1922	130. talent-spot < talent-spotter, 1937
50. escalate ² < escalator, 1959, fig.	131. Tase < Taser, 1991
51. fellow-travel < fellow-traveller, 1949	132. teleprint < teleprinter, 1971
52. fire-watch < fire-watcher, 1941	133. tenant-farm < tenant-farmer, 1949
53. front-load < front-loader, 1977, US	134. topline < topline, 1988
54. freeload < freeloader, 1950-55, infml, US	135. train-spot < train-spotter, 1974
55. game-keep < game-keeper, 1917	136. transduce ¹ < transducer, 1949
56. gate-crasher < gate-crasher, 1930, US, slang	137. transduce ² < transducer, 1952, microbiology
57. ghost-write < ghost-writer, 1928, US, slang	138. trench-dig < trench-digger, 1917
58. gold-dig < gold-digger, 1925, US, slang	139. trend-set < trend-setter, 1961
59. gramp < grampus, 1925, slang	140. trig < trigger, 1927
60. green-lane < green laner, 2011	141. trouble-shoot < trouble-shooter, 1950
61. guest-conduct < guest-conductor, 1945	142. turbocharge < turbocharger, 1981 engineering
62. haymake < haymaker, 1933	143. turbosupercharge < turbosupercharger, 1957
63. hedge-hop < hedge-hopper, 1928	144. tute < tutor, US, slang
64. helicopt < helicopter, 1961	145. underachieve < underachiever, 1954, psychology
65. high-jack < high-jacker, 1923, US, slang	146. vacuum-clean < vacuum-cleaner, after 1900
66. hitle < Hitler, 1940	147. varitype < VariTyper, 1955, chiefly US
67. hot-dog < hot-dogger, 1963, surfing slang	148. verge < verger, 1900
68. housepaint < housepainter, 1945	149. vive < viveur, 1928
69. incent < incentive, 1977, orig. and chiefly US	150. vocode < vocoder, 1981
70. jackroll < jackroller, 1990, South Afr, slang	151. watch-keep < watch-keeper, after 1940
71. kibitz < kibitzer, 1928	152. whipper-snap < whipper-snapper, 1908
72. kick-start < kick-starter, 1928	153. windjam < wind-jammer, 1952, US, slang
73. knuckle-dust < knuckle-duster, 1909, slang, US	154. window-clean < window-cleaner, 1950
74. lase < laser, 1962	155. window-dress < window-dresser, after 1900
75. lech < lecher, 1911	156. windsurf < Windsurfer, 1969, orig. US
76. lime < limer, 1973, the W. Indies	157. wire-tap < wire-tapper, after 1950
77. map-read < map-reader, 1952	158. volumize < volumizer, 1991
78. mase < maser, 1962	159. zip < zipper, 1932
79. mind-blow < mind-blower, 1970, slang	

TYPE II: verb from action noun

1. abreact < abreaction, 1912, psychoanalysis	158. kite-fly < kite-flying, 1965, banking, slang
2. access < accession, 1962	159. lab-examine < lab(oratory) examination, 1956
3. accreditate < accreditation, 1989	160. layback < laybacking, 1972, mountaineering
4. acculturate < acculturation, 1930, chiefly US	161. lead-poison < lead-poisoning, after 1900, US, slang
5. adenylate < adenylation, 1972, biochemistry	162. lenite < lenition, 1912, phonology
6. admirate < admiration, after 1900, US, slang	163. liaise < liaison, 1938, slang
7. advect < advection, 1957, meteorology, oceanography	164. libel-sue < libel-suit, 1944
8. age-date < age-dating, 1984, geology	165. lip-read < lip-reading, 1927
9. air-condition < air-conditioning, 1942	166. loan-translate < loan-translation, 1952
10. air-evacuate < air-evacuation, 1951	167. loco-spot < loco-spotting, 1968
11. air-ship < air-shipping, 1958	168. lorry-hop < lorry-hopping, 1916, slang
12. alluviate < alluviation, 1968	169. loud-hail < loud-hailing, 1943
13. appersonate < appersonation, after 1935, psychiatry	170. lyse < lysis, 1925
14. apple-polish < apple-polishing, 1951, US, slang	171. maffick < Mafficking, Mafeking, 1900
15. ass-kiss < ass-kissing, 1974, vulgar	172. marketize < marketization, 2011
16. autolyse < autolysis, 1903	173. mediocritize < mediocritization, 1972, orig. US
17. automate < automation, 1954	174. metalate < metalation, 1939, chemistry
18. auto-suggest < auto-suggestion, 1921, psychology	175. metallide < metalliding, 1967, manufacturing
19. aviate < aviation, 1900, US, slang	176. methanate < methanation, 1963, chemistry
20. avigate < avigation, after 1900, US, slang	177. metricate < metrication, 1970
	178. microcode < microcoding, 1985, computing
	179. microinject < microinjection, 1974, biology

21. back-calculate < back-calculation, 1988	180. micromanage < micromanagement, 1976, chiefly US esp. in politics
22. back-fire < back-firing, 1906, US	181. micropropagate < micropropagation, 1979
23. back-form < back-formation, 1943	182. micropublish < micropublication/ micropublishing, 1970-75
24. back-talk < back-talking, 1962, chiefly US, coll	183. mirate < migration, 1950, US, coll
25. batch-process < batch processing, 1964, computing	184. mixbathe < mixed bathing, 1906
26. belly-land < belly-landing, 1944	185. mode-lock < mode-locking, 1966, physics
27. bibliography < bibliography, 1961	186. mountain-climb < mountain-climbing, 1953
28. biomagnify < biomagnification, 1970-75	187. mutarotate < mutarotation, 1951, chemistry
29. blast-freeze < blast-freezing, 1965	188. night-fly < night-flying, 1927
30. blizz < blizzard, 1910, US	189. night-walk < night-walking, 1903
31. blockbust < blockbusting, 1954, US	190. nitpick < it-picking, 1966
32. brain-wash < brain-washing, 1955	191. non-intervene < non-intervention, 1944
33. break-dance < break-dancing, 1982, orig. US	192. notate < notation, 1903
34. brute < bruiting, 1903	193. one-hand < one-handedness, 1973
35. carboxylate < carboxylation, 1934, biochemistry	194. one-up < one-upmanship, 1963
36. carjack < car-jacking, 1991	195. ovate < ovation, 1988
37. carol sing < carol singing, 1954, Austr	196. paddock-graze < paddock-grazing, 1969, dairy farming
38. cavitate < cavitation, 1909	197. panic-buy < panic buying, 1974
39. chain-react < chain-reaction, 1959	198. parapent < parapenting, 2011
40. chemisorb < chemisorptions, 1935, chemistry	199. parcellate < parcellation, 1934
41. choreograph < choreography, 1943, orig. US	200. pattern-bomb < pattern-bombing, 1944
42. Christmas-shop < Christmas-shopping, 1951	201. pend < pending, 1953, chiefly commerce
43. chromatograph < chromatography, 1953, chemistry	202. perseverate < perseveration, 1915, psychology
44. coit < coition, after 1900, slang	203. phagocytose < phagocytosis, 1912, biology
45. cold-fax < cold-faxing, 2011	204. photoduplicate < photoduplication, 1961, US
46. computer-generate < computer-generating, the 1990s, computing	205. physisorb < physisorption, 1966, chemistry
47. concord < concordance, 1969	206. pinocytose < pinocytosis, 1955-60, physiology
48. contracept < contraception, 1965-70	207. planate < planation, 1969
49. convect < convection, 1953	208. planograph < planography, after 1909
50. co-vary < covariation, 1950	209. plea-bargain < plea-bargaining, 1965-70, US
51. crash-land < crash-landing, 1941	210. pole < poling, 1961, physics
52. crise < crisis, 1938	211. politick < politicking, 1917
53. cross-dress < cross-dressing, 1966	212. polygonize < polygonization, 1949, metallurgy
54. cross-own < cross-ownership, 2011	213. pot-shoot < pot-shot, 1913
55. cross-refer < cross-reference, 1951	214. pot-train < pot-training, 1972
56. cyberbate < cybernation, 1960-65	215. practice-teach < practice teaching, 1952
57. decarboxylate < decarboxylation, 1922, chemistry	216. predate < predation, 1974
58. decompensate < decompensation, 1903	217. price-fix < price-fixing, 1949
59. decondense < decondensation, 1965, cytology	218. proact < proaction, 1980
60. deconstruct < deconstruction, 1973, philosophy and literary theory	219. prognose < prognosis, 1900
61. decriminalize < decriminalization, 1963	220. propagand < propaganda, 1901
62. dedifferentiate < dedifferentiation, 1915-20, biology	221. psycho-analyse < psychoanalysis, 1923
63. defibrillate < de- + fibrillation, 1930-35, medicine	222. pyrolize < pyrolysis, 1932, chemistry
64. demerge < demerger, 1980	223. queue-jump < queue-jumping, 1973
65. demodulate < demodulation, 1932, electricity	224. quisle < Quisling, 1940, US, slang
66. derecognize < derecognition, 1961	225. racialize < racialization, 1930
67. deregulate < deregulation, 1964	226. rack-job < rack-jobbing, 1967, economics
68. derivatize < derivatization, 1939, chemistry	227. radiolocate < radiolocation, 1945
69. desorb < desorption, 1924	228. rate-cap < rate-capping, 1985
70. destruct < destruction, 1958, chiefly US	229. reconfigure < (re)configuration, 1964
71. direct-dial < direct-dialing, 1969, telephony	230. red-cook < red-cooking, 1972
72. disinform < disinformation, 1975-80	231. redfect < redefection, 1963
73. Disneyfy < Disneyfication, 2011	232. reflate < reflation, 1932
	233. reluct < reluctance, 1912
	234. remediate < remediation, 1969
	235. reparate < reparation, 1922
	236. repercuss < repercussion, 1923

74. divizonalize < divisionalization, 1982	237. respirate < respiration, 1968
75. dollarize < dollarization, 1982, economics	238. reune < reunion, 1929, US, slang
76. downmarket < downmarketing, 2011	239. revalorize < revalorization, 1928
77. downwell < downwelling, 1967	240. revalue < revaluation, 1921
78. drop-ship < drop-shipment, 1999	241. role-take < role-taking, 1972, psychology
79. drownproof < drownproofing, 1975-80	242. rough-land < rough landing, 1959
80. eco-label < eco-labelling, 2011	243. safekeep < safekeeping, 1966
81. eco-renovate < eco-renovation, 2006	244. sandsurf < sandsurfing, 2007
82. ecphore < ecphoria, 1917, psychology	245. scapegoat < scapegoating, 1943
83. electrophorese < electrophoresis, 1965-70, physical chemistry	246. self-destruct < self-destruction, 1969
84. elocute < elocution, 1909, US	247. self-determine < self-determination, 1924
85. emote < emotion, 1928, US	248. self-hypnotize < self-hypnosis, 1925
86. enculturate < enculturation, the 1970s	249. self-ignite < self-ignition, 1959
87. endocytose < endocytosis, 1970-75, physiology	250. seriate < seriation, 1944
88. eutrophicate < eutrophication, 1970, ecology	251. sericitize < sericitization, 1965, geology
89. evapotranspire < evapotranspiration, 1967, geography	252. set-shoot < set-shot, 1950, US, basketball
90. event < eventing, 1970, equestrianism (= horse riding)	253. shadow-box < shadow-boxing, 1924, US, slang
91. excyst < excystation, 1913, biology and medicine	254. shadow-cast < shadow-casting, 1971, psychology
92. exfiltrate < exfiltration, 1980, orig. US, military	255. shotgun-marry < shotgun marriage, 1950
93. exflagellate < exflagellation, 1912, biology, zoology	256. show-jump < show-jumping, 1936
94. exocytose < exocytosis, 1970-75, physiology	257. side-dress < side-dressing, 1959, US
95. exsolve < exsolution, 1942, geology	258. sight-read < sight-reading, 1903, US, slang
96. extrapose < extraposition, 1965, grammar	259. skateboard < skateboarding, 1968, orig. US
97. face-lift < face-lifting, 1939	260. skip-bomb < skip-bombing, 1955
98. fact-find < fact-finding, 1953, US	261. sky-write < skywriting, 1959
99. fascise < fascism, 1943	262. snowboard < snowboarding, 1985
100. featherbed < feather-bedding, 1962	263. snowsurf < snowsurfing, 2011
101. fellate < fellatio, 1941	264. softland < soft-landing, 1960
102. fine-tune < fine tuning, 1969, orig. US	265. sonolyse < sonolysis, 1964, chemistry
103. finger-pick < finger-picking, 1983, music	266. sorb < sorption, 1909, physical chemistry
104. Finlandize < Finlandization, 1970-75	267. soul-search < soul-searching, 1966
105. flag-wag < flag-wagging, 1923	268. sound-condition < sound-conditioning, 1959
106. flight-deliver < flight-delivery, 1949	269. sound-proof < soundproofing, 1959
107. fluoridate < fluoridation, 1949	270. spear-fish < spear-fishing, 1962
108. fly-tip < fly-tipping, 1985	271. speciate < speciation, 1964, biology
109. force-land < force(d) landing, 1928	272. speed-read < speed-reading, 1960
110. forthold < fort-holding, 1989	273. spermatize < spermatization, 1932, mycology
111. fragmentate < fragmentation, 1940-45	274. steam-distill < steam distillation, 1923, chemistry
112. freeze-dry < freeze-drying, 1959	275. subassemble < subassembly, 1940
113. frequency-modulate < frequency modulation, 1962, electricity	276. subincise < subincision, 1904
114. gas-flush < gas-flushing, 2011	277. subvocalize < subvocalization, 1947
115. gay-bash < gay-bashing, 1989, orig. and chiefly US, slang	278. sulphonylate < sulphonylation, 1980, chemistry
116. gazunder < gazundering, 1988	279. sun-bathe < sun-bathing, 1935
117. gelate < gelation, 1915, biology	280. superinfect < superinfection, 1954, medicine
118. gentrify < gentrification, 1972	281. superovulate < superovulation, 1956, physiology
119. gift-wrap < gift-wrapping, 1948	282. surf-bathe < surf-bathing, 1952
120. glam < glamour, 1937	283. surf-cast < surf-casting, 1975
121. glide-bomb < glide-bombing, 1940	284. surf-ride < surf-riding, 1953
122. google < googly, 1907, cricket	285. surveil < surveillance, 1914
123. grice < gricing, 1984, coll	286. swiden < swidening, 1978
124. grit-blast < grit-blasting, 1962	287. switch-sell < switch selling, 1965
125. group-think < group-thinking, 1959	288. sybiosis < symbiosis, 1960
126. haemolyse < haemolysis, 1902	289. tail-walk < tail-walking, 1971
127. hand-hold < hand-holding, 1963	290. tape-record < tape-recording, 1959
	291. tariffy < tariffication, 2011
	292. tectonize < tectonization, 1970, geology

128. hitch-hike < hitch-hiking, 1923	293. telecommunicate < telecommunications, after 1932
129. hoke < hokum, 1938, US, slang	294. telemarket < telemarketing, 1983, orig. US
130. holograph < holography, 1968, physics	295. telephone-tap < telephone tapping, 1960s
131. home-deliver < home-delivery, 1958	296. teleport < teleportation, 1947, psychics and science fiction
132. home-keep < home-keeping, after 1900	297. teletransport < teletransportation, 1968, psychics and science fiction
133. house-clean < house-cleaning, 1938	298. televise < television, 1927
134. husband-hunt < husband-hunting, 1955	299. thrombose < thrombosis, 1910, pathology
135. hydroborate < hydroboration, 1961, chemistry	300. touch-dance < touch-dancing, 1972, orig. US
136. hydrofracture < hydrofracturing, 1983	301. touch-type < touch-typing, 1962
137. hyperventilate < hyperventilation, 1931, physiology	302. town-plan < town-planning, 1909
138. ice-fish < ice-fishing, 1907	303. transvalue < transvaluation, 1912
139. immunosuppress < immunosuppression, 1965-70	304. trial-subscribe < trial-subscription, 1949
140. Indian-wrestle < Indian wrestling, 1938, US	305. trickle-irrigate < trickle irrigation, 1971, agriculture
141. infantilize < infantilization, 1943	306. tumescence < tumescence, 1966
142. infotain < infotainment, 2011	307. two-time < two-timing, 1947
143. inscript < inscription, 1923	308. type-cast < tape-casting, 1959
144. interconvert < inter-conversion, 1953	309. upkeep < upkeep, 1926
145. intercool < intercooling, 1944	310. upvalue < upvaluation, 1968
146. intergroup < intergrouping, 1970	311. valet-park < valet parking, 1983, US
147. interline < interlining, 1975, airlines	312. vinify < vinification, 1969
148. introgress < introggression, 1958	313. Vogue < Voguing / Vogueing, 2011
149. introject < introjection, 1925, psychology	314. water-walk < water-walking, 2011
150. island-hop < island-hopping, 1956	315. wedel < wedeln, 1963, skiing
151. jaw-bone < jawboning 1966 US, slang	316. window-shop < window-shopping, 1934
152. job-hunt < job-hunting, 1946	317. word-process < word processing, 1985, computing
153. job-share < job sharing, 1981	318. yuppify < yuppification, 1984, orig. US, colloquial, usually disparaging
154. jump-shoot < jumpshot, 1950	
155. junk < junction, 1941	
156. keeper < keepering, 1921	
157. kerb-crawl < kerb-crawling, 1971	

TYPE III: verb from adjective

1. anonymize < anonymized, 1975	34. peeve < peevish, 1913, US, slang
2. auto-destruct < auto-destructive, 1980	35. penure < penurious, 1910
3. benevol < benevolent, 1948	36. phase-modulate < phase-modulated, 1968, telecommunications
4. biodegrade < biodegradable, 1970-75	37. prefabricate < prefabricated, 1941
5. bonderize < Bonderized, 1938, engineering	38. quantitate < quantitative, 1927
6. bottle-feed < bottle-fed, 1957	39. red-shift < red-shifted, 1963
7. breast-feed < breast-fed, 1929	40. repug < repugnant, 1900
8. brill < brilliant, 1900	41. retice < reticent, 1906, a nonce-word
9. cairn < cairned, 1937	42. ripsnort < ripsnorting, 1975, orig. US
10. cathect < cathectic, 1925, psychoanalysis	43. rort < rorty, 1931, slang
11. computerize < computerized, 1960	44. sardine-pack < sardine-packed, 1959
12. custom-make < custom-made, 1949	45. scrag < scraggy, 1937, slang
13. decongest < decongestant, 1955-60, pharmacology	46. self-feed < self-feeding, after 1900
14. disproportionate disproportionate, 1934, chemistry	47. self-finance < self-financing, 1962
15. Dolby < Dolbyed, Dolbyized, 1977	48. shab < shabby, 1900
16. fetishize < fetishized, 1934	49. silicone < silicone, 1980, chemistry
17. floss < flossy, 1938, chiefly US, slang	50. silver-point < silver-pointed, 1976
18. french fry < french fried, after 1918, US	51. skeeve¹ < skeevy, 1986, US, slang
19. gangle < gangling, 1942, slang	52. skeeve² < skeevy, 1991, US, slang
20. garrul < garrulous, 1942	53. sozzle < sozzled, 1937, slang
21. gobsmack < gobsmacked, 1977, slang	54. steel-face < steel-faced, 1961,
22. half-choke < half-choked, 1948	55. stinge < stingy, 1946
23. half-starve < half-starved, 1952	56. storm-toss < storm-tossed, 1946
24. hard-wire < hard-wired, 1983, computing	57. streamline < streamlined, 1927
	58. stuff < stuffy, 1927, slang

25. housebreak < housebroken, after 1900	59. stupend < stupendous, 1904, (G. B. Shaw's word)
26. involute < involuted, 1909	60. superconduct < superconducting, 1964, physics
27. jet-propel < jet-propelled, 1956	61. tailor-make < tailor-made, 1952
28. mass-produce < mass-produced, 1940	62. tax-pay < tax-paid, 1918
29. nodulate ¹ < nodulated, 1939,	63. tenure < tenured, 1975, chiefly US
30. nodulate ² < nodulated, 1956, botany	64. unweight < unweighted, 1930
31. norm < normed, 1959, mathematics	65. zonk < zonked, 1950, US
32. obedience-train < obedience-trained, 1952	
33. outmode < outmoded, 1906	

TYPE IV: noun from adjective

1. adiabat < adiabatic, 1945, physics	52. parafovea < parafoveal, 1941, anatomy
2. aerodyne < aerodynamic, 1940	53. paramagnet < paramagnetic, 1909
3. alexithymia < alexithymic, 1976, psychology	54. paramedic < paramedical, 1970
4. allochthon < allochthonous, 1942, geology	55. peeve < peevish, 1952
5. anaphor < anaphoric, 1975	56. phon < phonic, 1936
6. androgen < androgenic, 1950	57. piscivore < piscivorous, 1973
7. apochromat < apochromatic, 1901, optics	58. pluton < plutonic, 1936, geology
8. apomict < apomictic, 1938, biology	59. polychromasia < polychromatic, 1909, medicine
9. archosaur < archosaurian, 1933, paleontology and zoology	60. polygene < polygenic, 1941, genetics
10. bicone < biconical, 1928	61. polytrope < polytropic, 1926, physics and astronomy
11. biface < bifacial, 1934, archaeology	62. polyunsaturate < polyunsaturated, 1945–50, chemistry
12. bilat < bilateral, 1989, infml	63. pretectum < pretectal, 1961, anatomy
13. bizone < bizonal, 1946	64. priss < prissy, 1923, US, coll
14. cat < catalytic, 1989	65. prototroph < prototrophic, 1946, genetics
15. clast < clastic, 1952, geology	66. psychedelia < psychedelic, 1967
16. congest < congested, 1902	67. raunch < raunchy, 1964, orig. US, coll
17. cryptozoa < cryptozoic, 1911, zoology	68. Rhaeto-Roman < Rhaeto-Romance, 1931
18. crystalloblast < crystalloblastic, after 1913, geology	69. rort < rorty, 1936, Austr, slang
19. decaf < decaffeinated, 1988	70. sardony < sardonic, 1935
20. dichromat < dichromatic, 1909, ophthalmology	71. scuzz < scuzzy, 1965-70, US, coll
21. didact < didactic, 1954	72. shonk < shonky, 1981, Austr, slang
22. dill < dilly, 1941, Austr and NZ, slang	73. skeeve < skeevy, 1990, US, slang
23. dip < dippy, 1932, US, slang	74. slant-eye < slant-eyed, 1929, orig. US, slang
24. ditz < ditzy, 1980-85, slang	75. sleaze < sleazy, 1954
25. epistasis < epistatic, 1917, genetics	76. smarm < smarmy, 1937, coll
26. eustasy < eustatic, 1946, physical geography	77. snoot < snooty, 1930, Austr, slang
27. exurb < exurban, 1955, orig. US	78. somatotroph < somatotrophic, 1968, physiology
28. ferromagnet < ferromagnetic, 1941	79. spasmogen < spasmogenic, 1952, pharmacology
29. flash < flashy, 1989, infml	80. spike < spiky, 1902
30. frivol < frivolous, 1903, coll	81. staghead < stagheaded, 1902
31. funk < funky, 1959	82. sternutator < sternutatory, 1922, chemical warfare
32. glitz < glitzy, 1977, orig. and chiefly US, slang	83. stigmat < stigmatic, 1901
33. gnotobiote < gnotobiotic, after 1949, biology	84. strop < stroppy, 1970, coll
34. gork < gorked, 1970-75, medical slang, disparaging	85. supramolecule < supramolecular, 1989
35. grunge < grungy, 1965, US, slang	86. synesthete < synesthetic, 1985
36. high-brow < high-browed, 1911, US	87. syntone < syntonics, 1940, psychiatry
37. homeostat < homeostatic, 1948	88. tack < tacky, 1986, coll
38. hypostasis < hypostatic, 1917, genetics	89. telephotograph < telephotographic, 1900
39. interfluve < interfluvial, 1902	90. tight-ass < tight-assed, 1969, originally and chiefly US
40. intersex < intersexual, 1910, biology	91. transgene < transgenic, 1985, biology
41. jank < janky, 1925, slang	92. trichromat < trichromatic, 1929, ophthalmology
42. lair < lairy, 1935, Austr, slang	
43. lysogen < lysogenic, 1958, microbiology	
44. meroplankton < meroplanktonic, 1909, biology	
45. mesotroph < mesotrophic, after 1911, biology	
46. metatroph < metatrophic, after 1930, biology	

47. methanogen < methanogenic, 1977, biology	93. trivia < trivialis, 1920
48. metronym < metronymic, 1904	94. ultramicroscope < ultramicroscopic, 1906
49. narcolept < narcoleptic, 1957	95. un-hero < un-heroic, 1989
50. orbicule < orbicular, 1931, petrology	96. wack < wacky, 1938, orig. US, slang
51. osmophore < osmophoric, 1919, chemistry	97. warb < warby, 1910, Austr, slang

TYPE V: adjective from noun

1. aerobatic < aerobatics, 1918	15. fluidic < fluidics, 1965
2. argentaffin < argentaffinity, 1926, histology	16. genethic < genethics, 1988
3. autoimmune < autoimmunization, 1952, immunology	17. hyperthyroid < hyperthyroidism, 1916, medicine
4. avionic < avionics, 1949	18. hypoparathyroid < hypoparathyroidism, 1910, medicine
5. biodiverse < biodiversity, 2011	19. intertextual < intertextuality, 1973
6. biometric < biometrics, 1901	20. logistic < logistics, 1934
7. capitated < capitation, 1983	21. paratroop < paratroops, 1941
8. cloze < closure, 1953, psychology	22. preimmune < premonition, 1948, immunology
9. complicit < complicity, 1973	23. superconductive < superconductivity, 1913, physics
10. co-ordinate < co-ordination, 1927, chemistry	24. surreal < surrealism, 1937
11. cybernetic < cybernetics, 1951	25. vacuolating < vacuolation, 1960, medicine
12. dermatoglyphic < dermatoglyphics, 1926	
13. desertified < desertification, 1980	
14. disfluent / dysfluent < disfluency / dysfluency, 2011	

TYPE VI: noun from another noun which is believed to be its derivative

1. aerobat < aerobatics, 1929	21. morph < morpheme, 1947
2. agoraphobe < agoraphobia, 1955	22. mythomane < mythomania, 1950-55
3. bloop < blooper, 1947, baseball	23. plasmal < plasmalogen, 1925, biochemistry
4. cineradiograph < cineradiography, 1965, medicine	24. plum(b) < plumbers, 1930, slang
5. cladist < cladism, 1964	25. polymerizate < polymerization, 1931, chemistry
6. claustrophobe < claustrophobia, 1911	26. protanope < protanopia, 1908, ophthalmology
7. computer-phobe < computer-phobia, 1974	27. pseudoallele < pseudoallelism, 1948, genetics
8. cryoscope < cryoscopy, 1920	28. radiochemist < radiochemistry, 1952
9. deuteranope < deuteranopia, 1902, ophthalmology	29. radiophobe < radiophobia, 2011
10. eco-label < eco-labelling, 1989	30. retardate < retardation, 1955-60
11. fact-find < fact-finding, 1989	31. schizophrene < schizophrenia, 1925, psychology
12. girocrat < girocracy, 2011	32. schizothyme < schizothymia, 1936, psychology
13. grantsman < grantsmanship, 1966, US	33. scintiscan < scintiscanner, 1960 medicine
14. grievant < grievance, 1955-60	34. shrink-wrap < shrink-wrapping, 1961
15. homophobe < homophobia, 1971	35. strip-tease < strip-teaser, 1936, orig. U.S, coll
16. hyponym < hyponymy, 1960-65, linguistics	36. tautomer < tautomerism, 1905, chemistry
17. idiotype < idiotypy, 1969, immunology	37. taxon < taxonomy, 1929
18. intertext < intertextuality, 1974, literary theory	38. telepath < telepathy, 1907
19. kine < kine(sics), 1952, linguistics	39. trunk < trunking, 1968, coll
20. leg-pull < leg-pulling, 1915-20	40. videocrat < videocracy, 2011
	41. vulcanizate < vulcanization, 1926

Type VII: prefix back-formations

1. clitic < enclitic / proclitic, 1946, grammar	9. flappable < unflappable, 1965-70
2. dentulous < edentulous, 1926	10. concerting < disconcerting, 2003, infml, joc
3. ept < inept, 1938	11. ilch < zilch, 2003, US, slang
4. gruntle < disgruntle, 1926	12. oxic < anoxic, 1970
5. lapsarian < infralapsarian, 1928, theology	13. patriate < repatriate, 1965-70, legislation
6. opsin < rhodopsin, 1951, biochemistry	14. pheresis < plasmapheresis, 1975, medicine
7. sorb < absorb & adsorb, 1909, physical chemistry	15. plore < explore, 1989
8. sorption < absorption & adsorption, 1909, physical chemistry	16. urb < suburb, 1965-70, informal
	17. customed < un-customed, 2011

Type VIII: inflectional back-formations

1. bicep < biceps, 1939	5. megaflop < megaflops, 1976, computing
2. gigaflop < gigaflops, 1976, computing	6. politrick n. < politricks, 2011
3. gladiola < gladiolus, 1926	7. sciapod < Sciapodes, 1915
4. kudo < kudos, 1926, slang	

Type IX: adjective from agent noun

1. cruciverbal < cruciverbalist, 2011	3. do-good < do-gooder, 1965-70, US, disparaging
2. carburetted < carburettor, 1972, chemistry	4. teenybop < teenybopper, 1966, coll