

Naděžda Stašková

# **ENGLISH BACK-FORMATION: RECENT TRENDS IN USAGE**

A comprehensive study of English back-formation in the 20<sup>th</sup> and the early  
21<sup>st</sup> century

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*To Andrea - my supportive daughter and friend*

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## ABBREVIATIONS

Austr	Australian
BCU	Birmingham City University, Research and Development Unit for English Studies
BF	back-formation (used for both the process and a word formed through it)
COED 11 <sup>th</sup>	Concise Oxford English Dictionary 11th Edition
COD 9 <sup>th</sup>	Concise Oxford Dictionary 9th Edition
coll	colloquial
D.com	Dictionary.com Unabridged; Random House, Inc.
D.com 21L	Dictionary.com's 21st Century Lexicon
DARE	Dictionary of American Regional English
f.	from
fig	figurative
infmtl	informal
intr. v.	intransitive verb
joc	jocular
MW's 11 <sup>th</sup> CD	Merriam Webster's 11 <sup>th</sup> Collegiate Dictionary
MW'sUD	Merriam Webster's Unabridged Dictionary
n.	noun
NZ	New Zealand
OED	Oxford English Dictionary
OED4	Oxford English Dictionary, 2 <sup>nd</sup> edition, version 4.0
Online ED	Online Etymology Dictionary, Douglas Harper, Historian
orig	originally
prob.	probably
RHUD	Random House Webster's Unabridged Dictionary
RUH	Rice University, Houston, Texas, Dept of Linguistics
South Afr	South African
tr. v.	transitive verb
US	American
v.	verb

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## 1 INTRODUCTION: BASIC CONCEPTS, METHODS AND AIMS

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 study attempts to provide a summarising description and analysis of English back-formation in the latest period of its development – the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> 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<sup>1</sup>) 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.

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<sup>1</sup> The full reading of the term “back-formation” has been retained in quotations from the literature and in the main headlines.

The present work concentrates its attention on the latest development of BF, combining diachronic and synchronic views. In the research, description and analysis of the material collected, the approach is based, above all, on the monograph by Esko V. Pennanen, *Contributions to the Study of Back-Formation in English* (Tampere, 1966), which became the methodological starting point of the present work and the main source of linguistic information on the phenomenon. Pennanen defines BF as "... 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" (Pennanen, 1966, p. 9). In his monograph, Pennanen built up a well-functioning typology of back-formed words, he collected relevant vocabulary over the span of several centuries (the oldest items coming from the 13<sup>th</sup> century) and described and analysed the process from both diachronic and synchronic points of view.

The material investigated in the present study is a collection of BFs with the date of the first occurrence recorded in dictionaries within the time period from 1900 till the present time, the first decade of the 21<sup>st</sup> century (in identification of back-formed words, the diachronic attitude was decisive – often the order of appearance, especially with the newer words, decided about the relevance of the word for my collection). The material has been classified according to Pennanen's typology, extended by three other categories as a result of the present research, and described from several points of view: quantitative, semantic, morphological and stylistic. In addition, several sources of neologisms have been explored and potential source words and their potential resulting BFs in the future have been identified.

In short, the present study is intended 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 20<sup>th</sup> 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.

## 2 THE RELEVANT TRENDS IN MORPHOLOGY IN THE 20<sup>TH</sup> CENTURY

The views on English BF, as they have been evolving over the last hundred years, were inevitably influenced by the main trends in morphology, and more broadly in linguistics, during the 20<sup>th</sup> century. It may therefore be useful to give a brief account of these.

Quite clearly, the development of 20<sup>th</sup> century morphology cannot be separated from the development of modern linguistics and its main stages. On the other hand, not every trend in 20<sup>th</sup> century linguistics has a direct bearing on lexical morphology and accordingly the following brief survey will be necessarily selective. The beginnings of modern linguistics are connected with Ferdinand de Saussure (1857-1913), and his theoretical approach, structuralism. He conceived of language as a system of mutually defining entities, and his key concepts (i.e. *langue-parole*, *signifiant-signifié*, *syntagmatic-paradigmatic*, and *synchronic-diachronic*) have influenced the shape and subsequent progress of linguistic thought. We can say that they are underlying every school of contemporary linguistics.

In Europe, structuralism is associated with three main schools. The Geneva School, including Saussure's disciples from the 1906-1911 period when he taught at the University of Geneva, has developed, interpreted and applied his ideas and theories most closely. The Copenhagen School forming in the middle of the 1930s around Louis Hjelmslev (1899–1965) and his followers is known for *glossematics*, a new approach regarding language as one of the symbolic systems (alongside non-linguistic systems, such as logic). The Prague School, initiated by the founder of English Studies in Czechoslovakia, Vilém Mathesius (1882–1945), in 1926 and including a number of prominent linguists, Jakobson, Trubeckoj, Trnka, Vachek, Skalička, Trost, to name but a few, is associated with functional and structural linguistics, emphasizing the concept of language as a system of functionally motivated and related units (see, for instance, Dušková-Vachek, 2003). Especially important were the works which dealt with phonology, morphology and syntax. Morphology became the centre of interest especially after WW II. For the subject at hand, lexical morphology, the name of one of the School's members, Miloš Dokulil, is particularly important. His concepts of word-formation in Czech (1962) have been applied to English by Štekauer (1998).

In the United States, structuralism takes on a more restricted form of descriptivism developed by Leonard Bloomfield (1887-1949). His main concern was with the processes of segmentation and classification of the surface-level physical features of utterance and his approach is marked by rigorous exclusion of reference to meaning and the underlying structures of language.

Partly in response to this rejection of abstract underlying structures of language Noam Chomsky develops his (transformational) generative grammar, establishing a set of formal rules capable of generating the potentially infinite set of sentences that constitute the language as such. He postulated a syntactic base of language, called deep structure, which consists of a series of rules that generates the underlying phrase-structure to form more complex sentences. The result of applying transformational-generative grammar is a surface structure, which, after words and pronunciations are added, is identical to an actual sentence of a language. Generative linguistics has subsequently gone through many stages and divided into many directions, including generative syntax, phonology, and semantics, applying the theory to different components of language.

Back to morphology: it has always been the core component of linguistics, starting with Graeco-Latin grammar scholarship. In 19<sup>th</sup> century European comparative linguistics, the study of morphological phenomena was the main tool of the reconstruction of the Indo-European languages and of Indo-European studies. In the 20<sup>th</sup> century the situation becomes more complicated – while in the context of European structuralism its development continues uninterrupted, although overshadowed by advances in other areas, in American linguistics, after the period of descriptivism in which morphology, treated in terms of grammatical process (Sapir, 1921) and morpheme arrangement (Bloomfield, 1933) and described exhaustively in Nida's monograph (1949), was seen as an important part of it, comes a break when “[In] the aftermath of the introduction of transformational-generative grammar in the mid-1950s, morphology was virtually ignored by linguists for almost twenty years” (Bauer, 2003, 166). The reason was that in generative grammar the Lexicon included only simple words (arbitrary signs), while compounds and derivations were relegated to the transformational component, and so morphology became part of syntax.

It is important to recall at this point that the approach to morphology in English linguistics is strongly influenced by the fact that inflection in English is very limited and that the borderline between inflection and derivation relatively fuzzy. Hence both inflectional morphology and derivational (lexical) morphology tend to be considered together. In fact the term morphology is primarily understood to refer to lexical morphology (i.e. word-formation). In modern grammars (Quirk et al., 1985; Huddleston, Pullum, 2002) issues of inflection are typically dealt with in terms of the phrase level and so the morphology-syntax distinction found in traditional grammars is absent. On the other hand, in languages rich in inflected forms, such as Czech, inflectional morphology and the semantics of grammatical forms are treated quite separately

from word-formation. Inevitably this results in a different status of (lexical) morphology in English and Czech.

As far as lexical morphology, i.e., English word-formation, is concerned, the most important author in the tradition of European structuralism in the second half of the 20<sup>th</sup> century is Hans Marchand (1969), who had a number of followers, e.g. Kastovsky (1971), Hansen (1985), Brekle (1968), Lipka (2002), Stein (1973), and others. Their attitudes have been expressed in a concise way by Kastovsky, who insists on “relative independence of a genuine word-formation component on the one hand, but at the same time systematic interaction with the other grammatical components” (Štekauer, 2000). They emphasize the role of meaning in linguistic description.

The development of (post-)generative morphology, especially its more recent, lexicalist phases, have been covered especially in Štekauer and Lieber (2005, 147-183) and partly in Bauer (2003). The first author to provide an extensive treatment of morphological phenomena within a transformational setting was Lees (1960), who described compounds as sentence transformations. The Lexicalist approach to word-formation is said to have started with two fundamental articles: Chomsky’s *Remarks on Nominalizations* (1970) and Halle’s *Prolegomena to a Theory of Word Formation* (1973). The foundations of generative morphology were established by Aronoff’s monograph (1976) which introduced topics that have been the staple of lexicalism to date. Lexicalism holds that derivation and compounding which produce complex words are accounted for by lexical rules which differ from and are independent of the syntactic rules of the grammar and operate in a separate component of language, the Lexicon. That is, word formation is not due to syntactic transformations and morphology is not part of syntax.

In the following development Lexicalism divided into a strong form (Chomsky-based attitude sharply separating syntax and morphology and excluding all morphological phenomena from the syntax) and a weak form which acknowledges the difference between derivational morphology (realized in the Lexicon) and inflectional morphology (implemented by the syntax) which gives it greater descriptive accuracy (cf. Anderson, *Where’s Morphology?*, 1982). Since then Lexicalism has embraced a number of languages (which resulted in strong interest in universals) and topics, such as the interface between different components of the grammar (morphology and syntax: most lexicalist morphologists today recognize that derivation and inflection are different morphological processes), allomorphy, bracketing paradoxes, evaluative suffixes and clitics, and others.

At present, most approaches to (lexical) morphology can be regarded as (neo)structuralist or neogenerativist (lexicalist) in one way or another. However, other theories have been developed

as well, such as Natural Morphology (striving to describe and explain such universal tendencies as the preference for deriving nouns from verbs; cf. Dressler et al. 1987), and within the last several decades particularly cognitive linguistics (in itself a collection of approaches rather than a uniform theoretical framework) has become quite influential, with its emphasis on language as an integral component of human cognition, a means through which the cognitive content of the human mind is structured (Onysko and Michel, 2010).

### 3 ENGLISH BACK-FORMATION IN THE LITERATURE

While the actual use of back-formed words goes back to the 16th century the technical term “back-formation” appears in 1889 in the New English Dictionary (subsequently retitled as The Oxford English Dictionary), with two further quotes from 1907 and 1926 (Fowler’s A Dictionary of Modern English Usage). Fowler (p. 40) defines BF as “making from a supposed derivative (as *lazy*, *banting*) of the non-existent word (*laze*, *bant*) from which it might have come.” He also adds that “some back-formations are not generally recognized as such, & have the full status of ordinary words, e.g. *diagnose* (from *diagnosis*), *drowse* (from *drowsy*), ... *sidle* (from *sideling* = *sidelong*), *grovel* (from *grovelling*, an adverb). But more often they are felt to be irregular, & used only as slang or jocosely; so ... *enthuse*, *locomote*, *maffick*, ...”.

Among the first treatments of BF in terms of English word-formation appears to be Koziol’s (1937, pp. 194-198) five-page chapter devoted to it (Ableitung durch Rückbildung). He understands it as “die Ableitung eines kürzeren Wortes aus einem längeren, und zwar dadurch, dass der Ausgang eines tatsächlich oder vermeintlich abgeleiten Wortes weggelassen wird” [derivation of a shorter word from a longer one by omitting the end of an actually or presumably derived word]. Koziol’s traditional approach informing his description of English word-formation is criticized by Jespersen (1942, pp. 3-5) in his monumental historical grammar in which he himself devotes one section to BF (1942, pp. 537-538) and makes references to it in several places. For Jespersen, BFs (which he previously called subtraction-forms) are “those clippings in which what is left out has no independent value as a word, but is a sense-modifying element” and “the characteristic trait of back-formation in contrast to other shortenings is that it always presupposes an analysis of the word different from the original or historical way of building it up, a re-interpretation, a ‘metanalysis’”. He illustrates this, for instance, by “When the verb *housekeep* is formed, the reason is that *housekeeper*, which is an ordinary compound of *house* and *keeper*, is metanalyzed as formed by the addition of the suffix *-er* to a composite vb.” and concludes by “Consequently shortenings of this category differ from the other categories in that they often lead to a new word belonging to another word-class than the original word”.

In the subsequent 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). As, in fact, most of what has been written afterwards can be found in these two works, they deserve special attention. Penanen’s study which forms the methodological starting point of the present work will be given a separate chapter. The outline of Marchand’s position will introduce a brief

chronological survey of various authors' references to BF from the late sixties up to the present. The survey is inevitably sketchy, focusing on the more interesting mentions and authors of significance in the field, as to trace all references to BF would be difficult and not particularly revealing.

Marchand's *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. To quote Stein (2000, 91-2), "no scholar or team of linguists has undertaken a work of the depth and dimensions that we find with Hans Marchand" and adds that his monograph "is still the most comprehensive linguistic description of modern English word-formation". His importance, Stein points out, is in that by "insisting on the descriptive distinction between compositionality of word-formation Marchand achieved the necessary distinction between synchrony and diachrony. The additional emphasis on the patternment aspect helped to distinguish between historical one-off coinages and productive formative devices." She reiterated her point quite recently (2009), saying that in spite of substantial work during recent decades on the internal structure of words in general as well English morphology, "There still is no successor to H. Marchand's classic work (1969), published 40 years ago. The most comprehensive synchronic descriptions of English word-formation are not separate publications but extensive chapters in the standard grammars of English, Quirk et al. (1985) and Huddleston and Pullum (2002)."

Marchand (1960, 1969) strictly distinguishes between diachronic and synchronic interpretation, and more specifically in terms of BF, between historical connection and derivational relationship. When dealing with examples of BF, which he basically sees as a process of diachronic relevance only, he emphasizes the necessity to take into consideration content analysis of the words if we need to make a grammatical statement, i.e. identify which word in the pair is the synchronic derivative. As he explains, verbs *peddle* and *burgle*, e.g., are the results of back-derivation and they are more recent than their respective agent nouns, *peddler* and *burglar*. Historically, the longer words are the bases. However, after we analyse the content features of the nouns, we see that "*burglar* is not 'one who burgles'... *burgle* is explained as 'act the burglar'. The semantic features of the longer word *burglar* are contained in the extracted, backderived word *burgle*. This marks the latter as derived.... *Peddle* is the more recent word historically, but it is not the synchronic derivative. *Burgle* is likewise the more recent word, but it is also the synchronic derivative" (1969, p. 393). The author introduces some other pairs of words showing the same relation: the shorter items, verbs, are diachronically back-derivations and, as a result of content analysis and the presence of the meaning of the

longer item in the meaning of the shorter one, identified as synchronic derivatives: *laze* ('be lazy') and *televise* ('put on television'). These are contrasted with other back-formed items, e.g. *edit* (< *editor*), *scavenge* (< *scavenger*), *sculpt* (< *sculptor*), which are synchronically classified as the same bases for nouns as in the cases where BF does not take part, e.g., *write* (> *writer*) or *revise* (> *revision*). The importance of content analysis is especially apparent with back-formed compound verbs, which Marchand refers to as pseudo-compound verbs, a typical representative being *typewrite* < *typewriter*. The semantic definition shows that *to typewrite* does not mean 'to write in type' but 'to use a typewriter' and results thus in the grammatical statement that the verb is not only a back-derivation (historical, extra-linguistic points of view), but also the synchronic derivative. Similarly, *to babysit* is not 'to sit with or beside a baby' but 'to perform the action of babysitting' or 'act as babysitter' (p. 394). Marchand's main conclusion is that the process of back-derivation has been used for two basic types of extracted words: those which are from historical point of view secondary but synchronically primary (*peddle*, *scavenge*, *sculpt*, etc.) – a smaller group; and those which are both historically and synchronically secondary (*televise*, *laze*, *burgle*, etc.) – a larger group.<sup>2</sup> He also emphasizes the role of analogy and even of semantic correlation which support the formation of a verb where the noun exists but the verb does not: "There is no suffix *-ion* to derive substantives from English verbs, which is the reason why such a backderivation as *reune* 1929 f. *reunion* is isolated in pattern – a matter of importance for the general adoption of such a verb. It is the pattern of *revise* / *revision*, *supervise* / *supervision* where the concept 'see, look' is present...that was followed to derive *televise* from *television*" (p. 395).

Adams (1973) treats the process of BF within the section on verb compounds, stating that these patterns are difficult to separate from each other. BF is one of the three possible ways of forming compound verbs (apart from zero-derivation and direct compounding). She starts the discussion by the general definition of BF: "...back-formation occurs when the formative process from base word to derived word is seen to be reversed: the more complex word comes first and then some element is subtracted from it, resulting in a pair of words which conforms with a base→derived pattern already existing. Thus the verb *to beg* is formed from the noun *beggar*, and this pair corresponds to pairs like *write* (verb), *writer* (noun), *sing* (verb), *singer* (noun), and so on. In some cases, as with *beggar*, a 're-interpretation' of an element in the source word takes place. The ending of *beggar* is not agentive in origin ... In other cases, as with compound verbs, a different kind of re-interpretation takes place: we do not 'mistake' an

<sup>2</sup> This approach is also applicable to some back-formations introduced by Penanen (1966) where the semantic definition of the resulting word clearly indicates the synchronic order of the items identical which the historical order of appearance (e.g. *hut-keep*: 'to act as a hut-keeper', *jay-hawk*: 'to act as a jay-hawker', *ferry-steam*: 'to go by ferry steamer', *outrigger*: 'to finish with outriggers', *wire-pull*: 'to actuate or promote by wire-pulling', etc).

element for something which is not, but we re-analyse the constituent structure of the source word” (1973, p.105). Her explanation of forming compound verbs through the process of BF is based on the idea of a change in the constituent structure of the compound noun (e.g. *globe-trotter*), which consists in understanding the *-er* as belonging not to the simple stem of the second element (*trot-*), but to the compound stem (*globe-trot-*). By subtracting the affix we get the resulting compound verb (*to globe-trot*). The subtracted affix can be either nominal (e.g. *-er* or *-ing*) or adjectival (e.g. *-ed*). In some cases, the suffix is of a different kind, as in, e.g., *double-header* ‘a train pulled by two locomotives’. Here the ‘characterizing’ *-er* suffix, added to the nominal stem, is re-interpreted as the agentive *-er* and *head-* is reinterpreted as a verbal stem. Similarly, the adjectival suffix *-ed* may be reinterpreted as the participial *-ed* (p. 107). Furthermore, Adams points out that we are not always sure which of the three processes underlies the forming of a particular compound verb, but in any case compound verbs are often felt as stylistically marked. The author does not only deal with compound back-formed verbs. She also briefly comments on simplicia and introduces examples of various nominal endings involved in the process, e.g. *-ion*, *-or*, *-ar*, *-ling*. In addition, she makes a brief remark on prefixed BFs explaining that a similar re-interpretation as that with compound verbs takes place there (e.g. *non-cooperation* > *non-cooperate*). Adams continues to emphasize the role of this re-interpretation in the process of back-formation in *Complex Words in English* (2001), where she treats back-formation as one of the types of reanalysis (together with affixation, blending and shortening). Reanalysis seems to be a fairly large source of complex back-formed items. The source words mainly involved are prefixed complex nouns (*non-cooperation*, *co-driver*) and noun and adjective compounds with nominalised and participial heads (*telephone tapping*, *gift-wrapped*) resulting in verbs (*telephone-tap*, *gift-wrap*). She discusses examples of words where meaning can function as a more relevant criterion than date, but back-derivation is still not accepted. So, while *casualize* (1950) can be defined as ‘subject to *casualization* (1920)’ and is taken as a BF, *appreciate* (1655), e.g., is probably not felt to be backformed despite the reasonable definition ‘show *appreciation* (1604)’ (2001, p. 137). In uncertain cases, frequency is the most important factor. Adams also deals with back-formed verbs from borrowed learned and technical terms: they are borrowed into English mostly as suffixed nouns (e.g. *fluorescence*, *diagnosis*), and later, when respective verbs are felt to be needed, BF takes place (*fluoresce*, *diagnose*).<sup>3</sup> Adams closes her discussion of BF by its comparison to other, considerably more

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<sup>3</sup> Adams (referring to Penanen, 1966) describes the situation in the historical periods of peaks in recorded back-formations, the middle of the seventeenth century and in the nineteenth century. The fact that in our material of the twentieth century, back-formed technical terms represent a considerable portion - 46% in the first half and 33% in the second - shows that this process actively continues and can be taken as one of the most important factors in back-formation of this time.

productive word-formation methods, describing this process as rather vague: “It is doubtful whether it is properly a derivational process at all, since abduction is involved, and circumstances like frequency and familiarity largely govern whether words are perceived as backformed or not” (2001, p. 138).

Aronoff (1976) agrees with Marchand that BF is of diachronic relevance only. He defines BF as: “...the extraction of a new word from an already existing word which appears to be bimorphemic.... It is a backwards application of a word-formation rule” (p. 27). BF, in his opinion, is easily handled in a theory in which all words in the dictionary are completely specified separate items. This corresponds with the word-based-morphology theory, the formulation of which is the object of his work. He illustrates this idea with an example of the pair *self-destruction* > *self-destruct*, stating that this result is the only possible choice from the two roots “-stroy” and “-struct”, directly back-derived from the full entry *self-destruction*, being supported by a principle of least effort. “In such a case”, the author adds, “we choose the form which is ‘closest’ to the one we started out from” (p. 28).

Bauer (1983) describes BF as “the formation of a new lexeme by deletion of a suffix, or supposed suffix, from an apparently complex form by analogy with other instances where the suffixed and non-suffixed forms are both lexemes” (p. 64). He doubts other authors’ (Pennanen 1966, Quirk et al. 1972, Tietze 1974) assertions that BF of this kind is purely a diachronic phenomenon, claiming that “there must have been some synchronic processes which allowed the analogy... Back-formation must be allowed for in a synchronic grammar if it is still a current method of forming lexemes” (p. 65). At the moment of the formation based on a synchronic rule, another, diachronic, process starts – development of the item formed towards either its establishment in the lexicon or its loss and oblivion. Bauer does not hold with preferring the term ‘back-derivation’ to ‘back-formation’, reminding of inflectional BFs represented by the classic example *pea* < *peas*. In order to involve all possible types of this process (including inflectional BFs and BFs from prefixed forms), he presents a simple formula:

Formation:  $X + A \rightarrow Y$

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

(where *X* and *Y* are form classes of lexemes and *A* is a particular suffix / prefix) concluding that “for a process to be a back-formation, the appropriate formation rule must also exist” (p.231). However, BF operates even with items where the suffix is not productive any more, but it is still subtracted (as in, e.g. *surveillance* > *surveille*). Bauer thus makes a general statement that “back-formation is concerned with the deletion of suffixes rather than with the undoing of morphological rules” (p.232). Examples as *contraception*, *cohesion*, or *self-destruction* yielding

unexpected back-formed verbs *contracept*, *cohes* and *self-destruct* are evidence of such deleting. As a result, he prefers to classify BF as a special case of clipping. Bauer continues holding this opinion also in his monograph *Watching English Change* (Chap. 2 *Lexical Change*; 1994), where he presents the results of his research in the area of word-formation. He introduces ten groups of various types of formation attested by The Supplement to the Oxford English Dictionary (1972-86): abbreviations, blends, shortenings, compounds, prefixation, suffixation, names, neo-classical compounds, simultaneous prefix and suffix, and other ways of word-formation (corruptions, onomatopoeia, phrases). With each category he observes frequencies of occurrence of new words during the time period of 1880-1982. BFs are grouped together with clippings under the category of “shortenings”. The most significant change is the growth of vocabulary in the category of abbreviations and blends, but there is a slight increase in the number of shortenings, too, and the share of this way of word formation in the given period is 2.3% (higher than that of abbreviations and blends). Even if BFs are not counted separately, but together with clippings, this result shows the trend in vocabulary development – BFs are still a productive way of word-formation. Finally, in his glossary of morphology (2004, p. 21) he stresses that BF “is one of the major processes by which compound verbs are formed in English, for example to *baby-sit* from *baby-sitter*.”

Quirk et al. (1985) take into consideration the ordinary language user who cannot see the difference between such pairs as, e.g., *advise* / *advisor* and *edit* / *editor*, classifying them equally as cases of suffixation. The authors refer to BF as a matter of historical fact. On the other hand, they admit new formations of this kind at present, especially in the production of denominal verbs. However, at the same time they warn of certain limits in forming the full range of inflections with back-formed verbs, and introduce some examples, such as *\*They sight-saw* and *\*She housekept*. Out of the most common resulting types, they mention compound verbs (e.g. *bottle-feed*, *brain-wash*) and nouns formed from adjectives (e.g. *polymer* f. *polymeric*). They refer to BF as a special case of matanalysis, in the sense that some of the back-formed compound items may not reflect original irregularities of the components and are sometimes inflected regularly (beside the expected, irregular inflections), e.g. *defreezing* > *defreeze*, past tense: *defrozeed* / *defroze*. This relexicalization is akin to BF (1985, p.1579).

In his brief survey of word-formation processes, Katamba (1994) highlights three properties of BF: reversed direction of formation, a gap in vocabulary as the main motivation for forming these words, and analogy supporting this process. The author’s synthetic entry on BF in *Encyclopaedia of Language and Linguistics* (2006) is something of a disappointment. It refers to many authors from the period between the 1960s and 1990s (Adams, 1973, 2001; Bauer, 1994;

Huddleston, Pullum, 2002; Marchand, 1969, and others), but surprisingly, Katamba omits the largest study on this phenomenon to date – the *Contributions to the study of back-formation in English* by Pennanen (1966). Nevertheless, there are of course many elements in his account that are presented by Pennanen in a similar way. So, for example, he uses terms like re-analysis and analogy, he exemplifies the method by a popular representative pair *beggar* > *beg*. On the other hand, his definition is enriched by some other, interesting, explanatory facts. Referring to Adams (1973), he adds the definition of meaning of the Latin *beghardus* and Old French *bégard* (brotherhood of idle, vagrant mendicants in the 13<sup>th</sup> century in the Low Countries, North of France), which reveals the semantic link with the present meaning.

Katamba mentions the fact that not all potential BF starting points have the capacity to yield a back-formed word, e.g. nouns in *-ity* (*electricity, identity*), while others do (*-ion: orientation* > *orientate, separation* > *separate, intuition* > *intuit*). Furthermore, he is concerned with acceptability of back-formed words, which are often commented on negatively and seen as reflecting a poor command of the language. And, as he adds, the long standing existence in language still is not a guarantee that they would be fully accepted. This is the case of the verbs *to aggress* or *to intuit* (1575, 1775) that have existed for quite a long time but still are not very commonly used. In the same way as Pennanen, Katamba explains that the strongest resistance for a back-formed word to be accepted occurs in the situation when it must compete with a long established base that has the same root. Also, some back-formed words are grammatically limited - some of their forms are not accepted by the speakers while others are: *to self-destruct* – the infinitive is probably the only form that is used, the past tense is unacceptable, similarly: *to daydream* or *to sightsee*. He also mentions the specific stylistic value of many BFs – they are viewed as jocular or odd because the speakers tend to use them freely as other “regular” types and often they unconsciously create an embarrassing or ridiculous situation (*allegation* > *allegate* > *\*allegator* - identical in the sound with “alligator”). This illustrates Katamba’s idea of their sporadic and unsystematic occurrence. Describing BF from compounds, Katamba gives a clear survey of three types according to the source compound:

1. *-er / -ing* suffixes in the source compound, the argument structure remains unchanged (*to stage-manage*)

2. verb + past participle in the source compound; again, the semantic relation remains intact (*to spring-clean*)

3. the second part of the source compound is a participial adjective; the first element of the resulting compound verb is some sort of adjunct (*to spoonfeed*)

Surprisingly, Katamba classifies hypocorisms (these are especially familiar versions of personal names in various languages, e.g. *Iza* or *Zabe* for *Isabelle* in French) as a kind of BF, and he defines them in the following way: “This type of back-formation is not motivated by analogy. It involves the truncation of a longer word without the excuse of there being an affix that is removed. ... In English such truncation is accompanied by re-suffixation (usually *-y* or *-ie*, e.g. *postman* > *postie*)” (2006, p.644). However, it is not clear from his account how he distinguishes this “type of back-formation” from (embellished) back-clipping. Including this type of clipping in the domain of BF is, essentially, in contradiction with Katamba’s earlier classification (1994, reprinted 2005), where he strictly separates the two processes and exemplifies hypocorisms (while not using the term) within back-clipping.

Another type of BF that Katamba includes is the type overlapping with inflectional morphology and he introduces the famous examples *cherry* and *pea* from *cherise* and *pease* which were mistaken for plurals. In his final evaluation, he describes BF as far less important than conversion, affixation or compounding, although he recognizes it is not an insignificant technique for forming words in English.

Beard (1995) describes BF, together with borrowing, loan translation, onomatopoeia, blending, clipping and acronymization, as one of logical, nongrammatical means of lexical derivation, referred to as lexical stock expansion (p. 16). When he explains the difference between derivation and inflection (2001), he defines derivation in its broader sense as “any process which results in the creation of a new word”. Such a definition corresponds with what happens in the process of BF. However, in the case of BF, he is more specific: “It is well known that words may be misanalyzed when a phonological sequence identical with that of an affix is misperceived as that affix. The result is that a previously nonexistent underlying base is extracted and added to the permanent lexical store via a process known as back formation. *Sculptor*, for example, was borrowed as an integral base into English. However, because the final phoneme cluster /əɪ/ is identical with an agentive marker in English, and since *sculptor* is an agentive noun, a verbal base, *to sculpt*, has been extracted and added to the stock of English verbs. Consequently, *sculptor* changes from a lexical base to a derivate” (2001, p. 9). He gives two reasons why he thinks BF is not a derivational process. Firstly, although the rules operating in BF seem to be regular and predictable, many potential back-formed words are not acceptable (e.g. *butcher* > \**to butcher*, *barber* > \**to barb*), and, as Beard says, there is no grammatically definable constraint preventing this. Secondly, a back-formed word, apart from being a member of the derivational paradigm as a zero-derivative (e.g. *laser*: *laserer*, *lasering*, *lase*, etc.), it itself forms its own group of derived items (*lase*: *relase*, *outlase*, *laser*, *lasing*, etc.). Beard concludes:

“... rather than forming a derivational relationship with a lexical base, back-formed words create a new base, expanding the underived lexical stock in a way that regular derivations do not. This characterization partially fits several other types of word formation which need to be distinguished from regular, grammatically determined derivation.” (2001, p. 9). The other types he has in mind are: clipping, blends, acronyms and analogical formations (e.g. *alcoholic* / *workaholic*). They all, including BF, tend to be conscious operations unlike grammatical derivation.

The next author, Robert W. Burchfield, is not a linguist, but an eminent lexicographer (*A Supplement to the OED*). However, as the editor of the widely and immensely popular *Fowler’s Modern English Usage* (3<sup>rd</sup> edition, 1996) he felt it important to update Fowler’s original definition (1926/2009) of BF and so the comparison of the two is interesting as it reflects the shift in the view on this process. As we have seen above, Fowler’s definition is fairly brief; he explains the process as making “from a supposed derivative (as *lazy*, *banting*) of the non-existent word (*laze*, *bant*) from which it might have come” (p. 40). He highlights the wrong interpretation of the supposed derivatives by those speakers who first used the back-formed words and also refers to the general feeling of irregularity of many forms resulting in their slangy or jocular connotation (e.g. *enthuse*, *locomote*, *maffick*, *orate*, and others). Burchfield’s definition (1996) seems to be more informative: above all, it introduces information about the rise of the term BF itself (coined by J.A.H. Murray). In his description of the process he focuses on the external form of the source word: “...the formation of a word from a longer word which has the appearance of being derived from it” – and introduces a variety of examples coming from the period of the 16<sup>th</sup> to the 20<sup>th</sup> century, indicating the high potential of recent compound words. He also comments on the neutral status of some items on the one hand (*diagnose*, *legislate*), and those with a tinge of jocularity (*donate*, *enthuse*) or even of being tasteless (*liaise*). He compares the different opinions on some back-formed verbs by American and British speakers: “Most Americans use *burglarize* and reject *burgle*; in Britain *burglarize* is rejected as a ‘vulgar Americanism’, and *burgle* is used without constraints.” Mentioning the role of analogy, he expresses his opinion that the process will produce many other items in the future.

A somewhat radical view of BF is adopted by Štekauer, who discusses BF in two works. In his historical review of morphological research (2000) he more or less summarizes Pennanen’s findings, while the other monograph (1998) is interesting in that Štekauer tries to incorporate BF in his theory of onomasiological word-formation. He rejects Bauer’s (1983) definition and explains his own approach: “One can hardly expect a back-formation process to take place

where it is preceded by a suffixation process because the latter is based on the combination of the word-formation base of an already existing word and a suffix. Thus, there is no need for the reverse process of removing the suffix” (p. 158). Further in the work, he adds: “...the notion of ‘back-formation’ has no place in the theory of word-formation as presented here. The conceptual fallacy in traditional accounts of back-formation is that they explain the origin of a “shorter” naming unit (e.g. *stage-manage*) without accounting for the way in which a ‘longer’ (*stage-manager*) naming unit came into existence. ‘Longer’ naming units must have been somehow coined; they could not merely have appeared ‘out of the blue’. Moreover, the suffixes included in ‘longer’ naming units have all the features of ‘normal’ suffixes. Therefore, I believe that both members of the ‘pairs’ related by the notion of ‘back-formation’ are generated separately” (p. 161).

His view of BF is indeed based on a specific theory which is probably not in agreement with “traditional” explanations of the phenomenon of BF. However, we cannot agree with some of his conclusions. In the case of the type *stage-manage*, e.g., Adams’ (1973) explanation is logical and transparent, i.e. the suffix *-er* is a real suffix, but reanalyzed as belonging to the whole compound noun. At that moment the unit is not the same as at the beginning at all, and the process of BF is a new process fully separated from suffixation. This is not as easily recognizable in the given example since the word *manager* is a fully independent and frequent agent noun, but it is more transparent with examples like *house-keeper* or *baby-sitter*. In these contexts, there would be no reason to add the agent suffix to the simple verb *keep* or *sit* without the presence of the object, so the reanalysis is an inevitable step. Another argument against the idea of invalidity of BF is, in our opinion, suffixation of a noun followed by BF resulting in a verb which did not exist in the language before (as in, e.g., *comedian* > *comede*, 1989). This is not an illogical and useless process of addition and subtraction of a suffix of one and the same word, it is more than that: formation of a word from another, different unit of vocabulary. What we agree with, is the fact that the coinage of such a verb is induced by a communicative need – a gap in vocabulary.

Štekauer also expresses his attitude to the *peddler* type: “In the case of naming units of the *peddler* type only the ‘longer’ word falls within the scope of word-formation: As indicated above, *peddler* must have come into existence in some way. Therefore, an auxiliary naming unit *peddle* is postulated for the sake of coining the ‘longer’ word. Later on, it became ‘actualized’ based on the demand of a speech community. However, being a moneme, it became actualized directly in the Lexicon (p. 162)”. This example is probably very close to that of mine above (“*comedian* > *comede*”) in that the origin of the noun *peddler* was based on suffixation of

Middle-English noun *ped* (“basket”) and then a new item of the vocabulary was created – the verb *peddle*. I attach weight to the strong influence of analogy with the class of verb-agent pairs; therefore I do not presuppose an actualization of an early postulated verb but formation of a completely new, missing item of vocabulary.

BF is briefly described also by Nevalainen (1999), who approaches the matter from historical point of view. Therefore she selects relevant historical data from the existing literature, quoting especially Pennanen (1966): the first considerable occurrence of BF in the 16<sup>th</sup> century and a brief survey of six Pennanen’s productive patterns<sup>4</sup>.

Mel’čuk (2000) discusses BF in connection with the delimitation of morphological processes which he broadly describes as “using a particular type of linguistic sign in order to express, within the boundaries of a wordform, a meaning applied to the meaning of the stem of this word-form”. A morphological process, as he says, is defined by three oppositions, (i) it is the use of a linguistic sign (therefore a morphological process is meaningful) as opposed to the use of morphological means, one-sided, meaningless entities; (ii) it is a morphological (i. e. word-internal) phenomenon and as such opposed to non-morphological, or syntactic, processes; (iii) morphological processes as events are opposed to morphological signs as entities. By applying these criteria Mel’čuk excludes suppletion and BF (as not expressing meaning) together with other word-manufacturing techniques from morphological processes (p, 532): “these phenomena, in sharp contrast to genuine morphological processes, are strictly diachronical: they expand lexical stock by creating new words, but they do not express meanings. BF (of the type *vacuum cleaner* > [*to*] *vacuum-clean*) is less obvious, but it is a diachronical phenomenon, too, even if it is highly productive and produces semantically predictable results. As soon as a verb of the type [*to*] *vacuum-clean* is formally derived by BF, it becomes semantically primary; thus, *vacuum cleaner* means ‘appliance designed to vacuum-clean with’; therefore, viewed synchronically, it is derived from the verb [*to*] *vacuum-clean*. (Before the appearance of the verb, the noun *vacuum cleaner* was synchronically a semantic simplex; *vacuum*, *clean* and *-er* were no more than etymology, however transparent.) Being diachronical by their very nature, word-manufacturing techniques cannot be morphological processes, the latter being typically synchronical.”

Dressler (2000) presents a wider notion of subtraction in the process of morphology and describes it in the following way: “Prototypical subtraction can be defined as a reductive grammatical morphological process which (i) is the only overt morphotactic signal of a morphological meaning and (ii) consists in reducing the base of the morphological process by

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<sup>4</sup> These patterns are going to be introduced and described in detail in the following chapter on Pennanen’s monograph, *Contributions to the Study of Back-Formation in English*, 1966.

one phoneme at its right edge ...”. On the basis of this definition he excludes many reductive phenomena from the class of subtractions, namely isolated “subtractions”, truncations and BFs. His arguments are as follows (p. 583): “Morphological processes are synchronic. This excludes diachronic shortenings such as back-formation (also called *back-derivation* or *retrograde formation*), as exemplified by the verb *edit*, which has been coined from the noun *editor* in analogy to pairs like *exhibit* / *exhibitor*. A frequently occurring type of back-formation may, however, eventually develop into a subtractive rule. In Polish, for instance, diminutives with the suffix *-k*, such as *wo’dka* ‘vodka’ (lit. ‘little water’) from *woda* ‘water’, gave rise to back-formations like *wo’da* ‘much/bad vodka’. Now *-k* can be subtracted from any nominal stem ending in this consonant (whatever its origin) in order to form an augmentative with the meaning ‘increased quantity’ or ‘bad quality’ (or also with positive connotations, depending on the speech situation; ...).”

Haspelmath (2002) mentions morphologists’ effort to develop a descriptive apparatus for expressing morphological rules and introduces two models: a morpheme-based model and a word-based model, saying that “questions of formalizations can be enlightening and help to bring some major issues into clear focus” (p.44). The word-based model is a word schema and it represents the common features of a set of morphologically related words, e.g. plurality. The morphological relationship between these sets of words can be represented in the morphological correspondence, describing, e.g., the relation between the singular and plural. Such a correspondence can be also formed for word-formation processes like, e.g. conversion or BF. In Haspelmath’s view, “The word-based model can explain how back-formations (like *to babysit* from *babysitter*) are possible. In the morpheme-based model, it is quite puzzling that speakers should be able to create a verb *babysit*, because English does not have a productive rule combining a noun and a verb in this way, and there is no explanation for the fact that *babysit* is semantically closely related to *babysitter*. In the word-based model, this can be readily described. The noun *babysitter* happens to match two word-schemas simultaneously. First, it matches the nominal compound schema, ... and, second, it matches the word-schema of non-compound agent nouns given on the right in the following correspondence (here ‘do’ represents a variable action meaning):

[/X/V ‘do’<sub>X</sub>] ↔ [/Xɚ/N ‘a person who (habitually) does’<sub>X</sub>’]

....The correspondence is not inherently directed, as the bidirectional arrow indicates. In addition to the creation of *-er* nouns from verbs (like *bak-er*, *writ-er*, *sinn-er*, etc.), this rule also allows the creation of verbs lacking the element *-er* from nouns containing *-er* that denote an agent of some sort. In fact, back-formation is so natural in this model that one wonders why it

does not occur more often: why do we not get *\*to butch* from *butcher*, *\*to past* from *pastor*, and so on? However, it should be kept in mind that the rule format of our word-based model is neutral with respect to productivity” (pp. 49-50).

In the *Cambridge Grammar of the English Language* (2002), BF is explained as a matter of deleting an affix and forming a more elementary word (= the base) from the source word. The authors list a survey of possible resulting bases, which may differ in structure, e.g. *edit* (simple), *recycle* (derivative), *underachieve* (compound). They emphasize those aspects of the process which are synchronically relevant: the process is productive (new words are still formed), irregular preterite and past participle forms are sometimes unacceptable, e.g. *\*He had day-dreamt all morning*. A special type of process is described too: “...other types of reversal are occasionally found. The compound verb *spoon-feed*, for example, was formed from *spoon-fed* by reversing the process that applies in forming the simple past participle *fed* from the lexical base *feed*” (p. 1638).

Plag (2003) mentions BF within the account of word-formation rules and proportional analogy and describes it as derivation by deleting a suffix (or supposed suffix). He points out that some words are not results of word-formation rules but formed only by analogy (e.g. *cheeseburger* after *hamburger*), but may consequently give rise to larger patterns (*chickenburger*, *fishburger*, etc.). In regard to BF, he says: “In English there is no productive process of suffix deletion attested, hence it is strange to posit such a morpheme-deleting rule simply for cases of back-formation...the existence of back-formation is to be expected in a schema-based model, because there is no inherent directionality in the relationship between the two sets of words that are related by the schema” (p. 187). Since resulting formations are usually expected on the right side of the schemas while back-formed words occur on the left, the author defines BF in the following way, referring to Becker (1993): “Back-formation can thus be defined as the application of a rule in the less productive direction” (p.187).

Furthermore, Plag deals with various suffixes, out of which some are often involved in BF, e.g. *-ate*: “There is a class of derivatives with chemical substances as bases, which systematically exhibit so-called ornative and resultative meanings... However, a large proportion of forms in *-ate* do not conform to this pattern, but show various kinds of idiosyncrasies, with *-ate* being apparently no more than an indicator of verbal status. Examples of such non-canonical formations are back-formations (*formate* ← *formation*) ...” (p. 93). Another affix is the prefix *un-*, which can be (apart from adjectives and verbs) attached to nouns where it expresses ‘absence of X’, e.g. in *uneducation*. Plag adds: “Such nouns are often the

result of analogy or back-formation” (p. 101).<sup>5</sup> When dealing with verbal compounds, Plag points out that the majority of them are best analyzed as the result of a BF or conversion process, introduces several examples of back-formed verbs: *proof-read*, *talent-spot*, *ghost-write*, *chain-smoke* and concludes that: “That the back-formation and conversion analyses make sense is supported by the above-mentioned fact that verbal compounds with nouns as non-heads are impossible in English, and by the fact that verbs cannot incorporate adjectival / adverbial non-heads” (p. 154). Examples of such non-existent verbs are *\*bookread* or *\*fastdrive*.

The suffix *-ate* is dealt with in an interesting way by Metcalf (2002, 111-115): he draws attention to (especially non-native) speakers’ tendency to over-employ the suffix in order to supply the tinge of action to words that occur to them too “passive”. As a result, “*-ate*” alternatives arise in (informal) communication to already existing verbs, e.g. *abandonate* for *abandon*, *lamentate* for *lament*, *provocate* for *provoke*, etc. Such words are not listed in dictionaries. On the other hand, verbs of this type may be the result of BF from corresponding action nouns, e.g. names of substances in chemistry (see Plag above): *fluoridate* < *fluoridation*, *carboxylate* < *carboxylation* (OED4), where we could suppose suffixation as more natural. With other examples, especially prefixed or compound ones, BF is more acceptable: *decompensate* < *decompensation*, *hyperventilate* < *hyperventilation* (OED4).

Booij (2005) describes BF as a prototypical case of paradigmatic word-formation, in which the direction of derivation is inverted. He explains: “The paradigmatic dimension involved here (as in *sculptor*) is that a word ending in *-or* is assigned an internal morphological structure with a verbal base on the basis of existing verb–noun pairs such as *terminate–terminator*” (p. 40). He follows the idea of reinterpretation also with verbal compounds (*to babysit*): “...the structure [[N] [V -er]N]N has been reinterpreted as [[N V]V -er]N, and subsequent back formation led to the rise of these N + V compounds” (p. 41).

Szymanek (2005) classifies BF as one of the minor word-formation processes which have contributed to the creation of some very recent words. He discusses compound verbs back-formed from compounds action, agentive and instrumental base-nouns and refers, among others, to two authors: Adams (2001), on the one hand, who says that English is not one of the languages where verb compounding is a productive process; and to Kastovsky (1986), on the other, who predicts that English “is on the best way” to develop a genuine compound verb type as an instance of noun-incorporation.

BF is seen by Kastovsky (2006) as having partly diachronic and partly synchronic relevance. He compares the subtraction of a supposed suffix in, e.g., *pedlar* > *peddle* to children’s (logical)

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<sup>5</sup> In the material collected in the present research for the second half of the 20<sup>th</sup> century, an example of such type is a fairly recent noun *un-hero* (1989) from *un-heroic* (adj.) (Ayto, 1990)

creation of base verbs from nouns resembling other agent nouns (like in *butcher* > \**butch*) and highlights analogy, reverse direction of derivation and diachronic relevance of such instances (*scavenge*, *sculpt*, *edit*, etc.). He also deals with compounds and emphasizes the idea that “English, like the other Germanic languages, had not developed verbal compounds as a derivational pattern. As indicated by standard dictionary definitions, the bases of these verbs are nominal or adjectival compounds, from which the verbs are back-derived by cutting off the suffix. But since these compounds contain a deverbal noun or adjective as their morphological determinatum, this truncation process leaves behind a verbal base, which can now act as a formal determinatum. This would also account for the morphological behavior of such formations, which adopt any irregularity features of the underlying verb, cf. the preterit *He proofread / typewrote the article*. This has developed into a productive pattern.” (p. 434). He assigns the current productivity of this pattern to reinterpretation of such verbs and suggests a tendency to analyze them no longer as back-derivations but as genuine compound verbs, i.e. to interpret *to proofread* as ‘to read proofs’ rather than ‘to do proofreading’. This idea is supported by a number of newly formed verbs without appropriate nominal bases, e.g. to *chaindrink* (after *chainsmoke*). In his opinion, if this tendency continues, English may develop a pattern where the first member of the compound is incorporated into the verbal construction.

Miller (2006) speaks of a putative base that is formed by de-affixation and states that BF is clearest when a form is created to underlie a borrowing. He does not consider the dates of first record reliable in identifying BFs, but he thinks that “the longer the intervening time, the more secure is the probability of back-formation” (p. 6). He provides a great number of examples of back-formed words coined since the 16<sup>th</sup> century till now, the most recent ones being *back-calculate* (1987), and *accreditate* (1988).

Biermeier (2008) investigates word-formation in the new varieties of English around the globe. In his chapter on BF, he summarizes attitudes of various authors (Plag 2003, Greenbaum 1996, Bauer 1983, and others) and generally comes to the conclusion that the authors devoted only a small chapter or even part of one chapter to this matter. He mentions Pennanen’s classic study *Contribution to the Study of Back-Formation* (1966) as the main authority in the field of BF and the only comprehensive study on this topic so far. One of the problems Biermeier sees in the interpretation of this process is the question of its diachronic or synchronic relevance. He admits that “it is synchronically difficult (if not impossible) to determine if *to burgle* was back-derived from *burglar* or if, on the other hand, the verb serves as the base to which the suffix *-ar* was attached” (2008, p. 140). He draws attention to Bauer’s opinion that BF must be allowed for in synchronic grammar if it is still productive. Pennanen also approaches the phenomenon both

synchronically and diachronically and from this point of view, Biermeier considers his formulation as the most concise: “Back-formations are normally not recognized as such by the average speakers. To them they are synchronous phenomena of the language system; in this sense back-formation is relevant only in the diachronic aspect. On the other hand, there are speakers, who deliberately employ a back-formed word, or even coin one” (Pennanen, 1966, p.149). For his investigation of BF in new varieties of English (in India, Singapore, Philippines, Kenya, Tanzania, New Zealand and Jamaica) and his comparison with Standard English he compiled a list of 65 items from the standard literature (mainly represented by Pennanen, 1966) and he found out that in East African English (Kenya or Tanzania) this category of word-formation is used to a considerable extent.

The items that the author found in the corpora of the varieties he investigated often had stylistic labels – they were colloquial, humorous, slang or borrowed from American English and they appeared in particular genres or regions. Some examples that he introduces are: *boot-lick* (Kenya), *to burgle* (India, Tanzania), *to dress-make* (Kenya), *to hen-peck* (Tanzania), *to enthuse* (India, Singapore, Philippines, Tanzania), *to baby-sit* (India, Singapore, Philippines, Kenya). The only new coinage he discovered in his research is the verb *to bookrun* (Philippines 2008; “the activity of taking care of financial transaction”), derived from the noun *bookrunner* (2006) also occurring only in the Philippines. This is an evidence that BF as a method of word-formation is not a productive tool of forming new words in these language varieties. He explains the reasons for this state in the following way: “Since there are no clear rules as to how words are produced by back-formation, writers and speakers lack the linguistic creativity or are unwilling to coin words that way” (p.145). Some varieties (Great Britain, India, Singapore) prefer BF in their spoken components, others (Philippines, East Africa, New Zealand) make use of BF in their written components. BFs appear in every text type with varying frequencies. Frequently used categories are informational writing and fiction.

Lieber (2009) emphasizes the contrast between the historical fact of the origin of the source words and the resulting BFs on the one hand, and the ability (or rather inability) of a common speaker to recognize back-formed words in the language: “Indeed speakers are sometimes surprised to learn that the verb did not exist before the corresponding noun, so ordinary-sounding has the verb come to be” (p. 51). She illustrates this idea by examples like *peddle* and *edit* back-formed from *peddler* and *editor*.<sup>6</sup> Another question in which many authors are in agreement is the fact that back-formed words are often felt ugly, odd or even ridiculous by

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<sup>6</sup> Greenbaum (1996) admits that some back-formations are felt as such by at least some people (e.g. *emote* < *emotion*, *enthuse* < *enthusiasm*) and he even recommends synchronic interpretation of historically clear pairs: “Although *editor* appeared before *edit*, in a description of current English it is appropriate to analyse *editor* as derived from *edit* by the addition of the suffix –or” (p. 466).

common native speakers (Greenbaum, Lieber and others). Lieber herself illustrates this fact with her own feeling when hearing the verb *incent* in 2007, in a public speech by a governor, and she says: “In context, it clearly was a back-formation from the noun *incentive*, and it sounded quite odd at the time” (Lieber, 2009). In fact, the verb was not so new at that time; Merriam Webster introduces the date of origin 1981, OED4 even 1977.

In this chapter various approaches to BF in the literature have been presented. To briefly summarize, the most frequent features that most of them discuss are diachronic or synchronic relevance of the phenomenon, its analogical nature, the (in)ability of users to recognize back-formed words in everyday language, re-analysis of the source words, the increasing share of verbal compounds resulting from the process, and the tendency to admit a new pattern in English – verb compounding.

One author has not been introduced in detail so far: Esko V. Pennanen. He described BF probably more thoroughly than any other linguist and his study and analysis of the process, and especially his typology of back-formed words can be used as the foundation for any possible subsequent research. This also applies to the present study, for which Pennanen’s work forms the methodological starting point. Therefore, I believe that Pennanen’s contribution to the study of this phenomenon deserves to be given a separate chapter.

#### 4 BACK-FORMATION ACCORDING TO PENNANEN

Esko V. Pennanen gave a profound description and analysis of BF in his monograph *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. He follows the rise and development of BF over time, from the 13<sup>th</sup> 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. As he himself says, “so far, few treatises on back-formation have attempted to combine the two principal methods of linguistic research: diachronic and synchronic .... Back-formation had been usually a subsidiary topic of a specialized study, mostly on denominative verbs” (p. 29).

His investigation started from the Middle English period, after inflection had been weakened: “The weakening of the flexional endings during the early ME period was an essential to the rise and development of back-formation – analytical processes, which are typical of back-formation, started to be possible because the inflexions removed did not obstruct them” (p. 11). He collected material from several sources, among others, e.g., from Oxford English Dictionary (by 1933), The Shorter Oxford Dictionary (1959), Dictionaries of New Words (1953, 1957), The English Dialect Dictionary (1923), American College Dictionary (1957) and others, and also from several newspapers and magazines (The Reader’s Digest, Life and Time).

In his description of BF, Pennanen emphasizes several distinctive features:

1. The process has a regressive direction, from a derivative towards a primitive.
2. The source form is misunderstood as a derivation (or inflection) of the resulting (shorter) form.
3. Although normally the back-formed “primitive” should be later in appearance (and most often it is) than the derived “base”, this criterion is not reliable enough as written sources might not have come to us.
4. A back-formed word is a new word of a given vocabulary.
5. BF operates on the basis of analogy – reflecting a parallel existence of a root word and its derivative. The result is that the missing member, in the case of BF the “base”, is created. However, we have to take into consideration the concord in meaning of the primary and the supposed secondary word. In other cases, there is no derivative relation between the words. As an illustration Pennanen introduces a back-formed word from Franz Brender’s study (1920) to *unwish* (1594) < participle *unwished* (1583) and in spite of the later appearance of the verb he

comes to a conclusion that the participle cannot be the source of the verb as the meaning of the verb is not simply *not to wish* but: 1. *to cancel a wish* and 2. *to make an end by wishing* (OED). The verb is probably a prefix formation *un + wish*.

Furthermore, Pennanen pays attention to the different types of words classified as BFs in literature. Based on Brender (1920), Jespersen (1942) and other authors, he makes the following conclusions: Inflectional BFs (*pea < pease*, *decimvir < decemviri*) should not be included into the category of BF because only one element of the internal word-form changes (i.e. number), while the semantic meaning and the class (noun) remain the same. This type together with, e.g., the type with subtracted supposed article, pronoun or a prefix (*plosive < explosive*) can be classified as cases of general shortening, different from BF, as the newly created word is on the same level as the basic word (i.e., they have the same inner form). He also excludes from the process of BF cases of syntactic ellipsis (*orient < orient pearls*) and he explains the distinction between BF and folk etymology: “Only in the case of the subtraction of a presumed verbal ending (*sidle < sidling*) or a suffix (*edit < editor*) the resulting subtraction forms correspond to our standards of back-formation... Folk etymology deals with word meanings and resemblance of forms of semantically close words (*sparrow grass* for *asparagus*). Back-formation creates what are supposed to be primitives, i.e. folk etymology falls in the field of semantics while back-formation is a method of word-formation” (pp. 38-39).

Another type of words included by some authors in the class of BFs that Pennanen mentions involves hypostasis (inflectional forms which acquired conceptual independence, e.g. *ism(s)*, *ology*, *burger*, etc.), and he agrees with Brender (1920) that “back-formation is a process of word-formation in the proper sense, while hypostasis transforms a word as to its syntactical application without a change of the form being necessary” (p. 40). He emphasises the important characteristic of BF, which is to create supposed primitives. The resulting unit of hypostasis – the noun *ism* – was formed by conversion from the suffix *-ism* and it cannot be seen as its primary form or original, and it does not seem likely that *ism* was morphologically “metanalysed” and put on the same level with a simplex. On the other hand, in the case of *burger*, for example, such re-interpretation took place (into *ham + burger*) and as a result new combinations were created with the newly formed independent base *burger*: *cheeseburger*, *chickenburger*, *fishburger*, etc. Based on these arguments, Pennanen makes the conclusion that hypostasis and BF are two different processes.

One of the most important results of Pennanen’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* and *composita* are included. The classification is very

clear and has become the methodological basis of the present work for presenting the analysis of the 20<sup>th</sup> century's material.

The six types are as follows (pp. 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.

In his list, each item is provided by Pennanen with the year when the word appeared, its part of speech, part of speech of the source word and the etymology. The information is mainly based on the OED. With some words, the author controverts the facts in the entry and gives reasons for his different opinion. One example of this kind is the verb *law-break*: Pennanen does not agree that the verb is a compound from *law* and *break*. Similarly, he describes the verb *kidnap* as being possibly a BF from *kidnapper* and does not agree with the OED theory of a compound from *kid* (n.) and *nap* (v.), making reference to Preuss (*Backformation oder Noun-Incorporation* II, 1960).

With some other uncertain examples he at least considers the factor of time of appearance taken into consideration in the OED, which, as he himself had remarked earlier in the text, is not very reliable. This is the case of, e.g., the word pair *cobble* and *cobbler*: "...the latter, though in its form a derivative of the verb, has as yet been found much earlier. Of the derivation nothing certain is known" (p. 45).

Very often, Pennanen compares various meanings of one and the same word, where the origins may differ. So with the verb *to edit*, he comments on alternative etymologies given in the OED for the first and for the second meaning (derivation from the Latin past participle *editus* and Bf, respectively), and he comes to the conclusion that both meanings may have been the results of BF because of their closeness.

Where useful, the author introduces the definition of meaning. What can be considered interesting, from the point of view of the present work, is the way in which some definitions are

formulated. On the one hand, there are true definitions that express the conceptual meaning of the resulting word independently on the source word, e.g. *match-maker* (n.) 1639 / *match-making* (n.) 1821 > *match-make* (v.) 1865 – “to plot or contrive to bring about a marriage”. On the other hand, definitions like, for instance, those of the verbs *hut-keep*: “to act as a hut-keeper”, *jay-hawk*: “to act as a jay-hawker”, *ferry-steam*: “to go by ferry steamer”, *outrig*: “to finish with outriggers”, *wire-pull*: “to actuate or promote by wire-pulling”, etc., indicate clearly that the resulting “primitive” verbs would have never come into being without the existence of their source nouns and that the morphological motivation goes in the direction typical of BF even from a descriptive (synchronic) point of view. In this, the above mentioned pairs of noun + back-formed verb are similar to conversion pairs where the direction from noun to verb is also clear through their semantic relation (*bridge* n. > *bridge* v.: to join by a bridge).

Pennanen also records some nonce words, e.g. the verb *ank* back-formed from *anchor*, used by the American humorist J.K. Bangs<sup>7</sup>.

Making general remarks on the history of BF, Pennanen summarizes the existing general knowledge of this phenomenon: “...back-formation can hardly be spoken of before 1500 ... it became really productive as a pattern of word-formation only since the 19<sup>th</sup> century” (p. 87). The factors explaining this later occurrence of BF are above all strong influx of foreign words into English and the loss of inflections after the middle of the 12<sup>th</sup> century. As a result, English is then becoming a sort of new, different language compared to Old English. One of the contributions to the development and support of BF was the fusion of various suffixes into the uniform *-er*, which caused many foreign nouns with “strange” endings (e.g. *-ard*, *-eur*, *or*, *-our*) to get out of their isolation and become involved in the process of BF.

Pennanen describes the emergence of BF as roughly conforming to the influx of new words in to the language; on the other hand, he explains the reason why BF is more productive in later stages of English: “back-formation is least compatible with periods of radical change in the language. It seems to need a more or less organized field of operation” (p. 89). The development of society and language is not as continual as we would imagine, so there were certain peaks and lowest points in the appearance of BFs before the 19<sup>th</sup> century. The first significant peak was in the middle of the 17<sup>th</sup> century; in the previous period, the main means of forming new verbs was conversion, which led to a reduced need for reliance on BF. One of the main factors in the steep rise in the occurrence of BFs in the 19<sup>th</sup> and 20<sup>th</sup> centuries was the immense progress in all spheres of society accompanied by the modern tendency to compress a maximum of achievement into a minimum of space and time. In this sense, BF corresponds well with this

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<sup>7</sup> Words of this kind, however, are not going to be the target of our work as we base our study on institutionalized words listed in dictionaries.

effort – subtraction of the endings in order to acquire new items of vocabulary seems to be almost as easy as conversion.

As far as the individual types of BFs are concerned, Pennanen draws several conclusions:

- 1 BF has been essentially a means of producing new verbs (Types I-III).
- 2 The principal method of deriving verbs from nouns and adjectives is by conversion or by means of suffixes. As a result, verbs are not the starting point of BF, because such verbs would be suffix-formed verbs only while majority of verbs are directly convertible.
- 3 Nouns and adjectives formed with suffixes do not lend themselves easily to conversion, so where the resistance to conversion is strong enough, the way from noun to verb takes its course via BF.
- 4 Type IV (noun from adjective) is modest in occurrence for two reasons: there is not a great need to form nouns from adjectives as nouns may be used in the function of pre-modifiers without change in form and the number of suffixed adjectives formed from nouns is accordingly rather low.
- 5 The two remaining types (adjective from an abstract noun and noun from another noun) must be looked upon as sporadic, occasional formations.

In his detailed discussion of the individual types, his target is to bring out a profile of the line of development in each case. He introduces a survey of various types of words serving as the starting points for BF:

**Type I** involves the following lexical and semantic categories of words:

- a foreign word taken over into English and interpreted as an agent noun (*beggar* > *beg*) – the “classical” type of BF – with a fictitious verb as a result;
- a genuine agent or instrument noun of foreign origin with other suffix than *-er* (*editor* > *edit*);
- an agent noun of foreign origin, which originally had the suffix *-er* or whose ending came to be *-er* after adoption into English (*usher* > *ush*);
- an agent or instrument noun formed on native basis (*cobbler* > *cobble*);
- an agent or instrument noun that has been formed from a noun by means of the suffix *-er* (*drover* > *drove*; *drove* = a herd of cattle, *drover* = a person who drives the cattle, *to drove* = to drive the cattle);
- a compound consisting of a noun (or adjective or adverb) and an agent noun reinterpreted so that the suffix *-er* is understood as belonging to the whole compound instead of

to the final component; a dominant type in the 19<sup>th</sup> and 20<sup>th</sup> centuries: it is a process resulting in verbs which Marchand calls pseudo-compound verbs (*law-breaker* > *law-break*).

In **Type II** verbs are formed from nouns of action ending in *-ing* and other endings (*-ation*, *-ion*, *-sis*, *-y*). In this category, simplicia are in a great majority and the suffix *-ing* can be looked upon as representing this pattern. The most frequent source words are

- nouns borrowed from other languages (*dawning* > *dawn*);
- nouns or adverbs in *-ling* (*suckling* > *suckle*);
- proper names in *-ing* / *-ling* or derived from other action nouns the various endings of which were pronounced carelessly as [in, lin] (*Mafikeng* > *maffick*, *tampion* > *tamp*) - a “classical type”;
- verbal nouns which have been formed by attaching the suffix *-ing* to nouns (*yachting* > *yacht*);
- scientific and technical nouns, especially neoclassical compounds ending in *-y* like, e.g. *-graphy* / *-pathy* > verbs in *-graph* / *-path* (a result of similarity in pronunciation of the suffix *-ing* and another suffix *-y*);
- nouns in *-ation* > verbs in *-ate* ( a result of Latin influence on the vocabulary of English)

As far as BF from compound action nouns is considered, the principle is the same as with agent nouns: the suffix is reinterpreted as belonging to the whole compound instead of the final element only and then subtracted. This type is fairly “old”, the first instance appears as early as the 14<sup>th</sup> century, but the highest occurrence of this pattern is found in the 19<sup>th</sup> century and continues in the following one.

**Type III**, on the other hand, shows the opposite trend in appearance – the verbs formed by BF from either participial adjectives in *-ed* or *-ing* or adjectives with other suffixes are the most numerous during the 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> centuries but after 1800 the type shows a declining incidence. Although some basic adjectives have several various suffixes (*-al*, *-ant*, *-astic*, *-en*, *-ic*, *-ish*, *-ous* and *-y*), the prevailing form of the basic word is past participle. So, the principal pattern of the Type III is the BF from adjectival words ending in the dental suffix *-ed* or *-t*, which were originally attached to weak verbs to form the past participle or to nouns to form adjectives expressing the possession of the attribute or thing expressed by the noun. There are several classes within this type:

- the adjectival word is interpreted as a participle (*naked* < OE *nacod*);
- the basic word is a certain modification of an existing word and becomes analysable as participial adjective and thus the starting point of BF (*dishevel* < *dishevelled*);

- the basis is formed by adding the suffix *-ed* to mostly Latin or French verb stems (*perplex* < *perplexed*);
  - the basic word was formed by adding the suffix *-ed* to a noun (*mail* “to arm with a mail” < *mailed* < *mail*) or to an adjective (*grizzle* “become grey-haired” < *grizzled* < *grizzle* “grey”).
  - a combination of a prefix and a past participle (resulting in pseudo-prefix-formed verbs, e.g. *prefabricate*)
    - compound basic words – compound adjectives (*flat-roof* < *flat-roofed* < *flat roof* + *-ed*), the most frequent relationship between the two elements being the adverbial relationship.

The main principle of **Type IV** is that the starting point is a word formed in some other way than with an adjectival suffix from a noun, but which is thus interpreted. The “classical” example is the resulting noun *stupe* < *stupid* (taken for the past participle because of its phonetic form [-id] < Latin past participle *stupidus*). Another significant group are the back-formed bahuvrīhi-type nouns from syntactic groups to which the *-ed* suffix was attached (*boss-eye* < *boss-eyed* < *boss eye* “blind on one eye”).

In **Type V**, Pennanen presents another example of BF – pairs of words which he thinks deserve special attention. Firstly, there are two adjectives back-formed from abstract compound nouns: *homesick* and *greensick* and as usual, the suffix is considered to belong to the whole compound (*homesickness*, *greensickness*). Secondly, he mentions the pair *sipid* < *insipid*, where the process involves a prefix and is semantically based on the relation of negative and positive, positive being felt as the primary concept. This example needs some comment here. In one of the previous chapters of his monograph (p. 36), Pennanen, drawing on Jespersen’s survey of special subtracted items, refuses prefix-based shortenings to be taken as BFs and explains this approach by the example *plosive* < *explosive*, stating that both the words have identical inner form. On the other hand, he includes *sipid* < *insipid* (1620) among BFs of Type V, perhaps because of the semantic polarity of the two words. I agree that this pair is essentially different than *plosive* < *explosive*, which really appears to be a mere shortening<sup>8</sup>. However, the pair *sipid* < *insipid* is actually the only case of a prefix-based BF in the whole of Pennanen’s material (although other examples could be given: *abled* < *disabled* and *couth* < *uncouth*) and its classification in Type V, in my opinion, is not very fortunate. The pair is absolutely different from the rest of the words in this class, even if the author defines words of this category as follows: “An adjective is back-formed from an abstract substantive, adverb *or another adjective*,

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<sup>8</sup> A similar example is the pair *phoresis* < *aphoresis* (1975). MW’sCD, however, introduces *plasmaphoresis* as the source word and labels *phoresis* as informal. In the pair *phoresis* < *plasmaphoresis*, the relation between the items is not shortening, nor change of polarity, but hyponymy, as there are other sorts of phoresis: leukaphoresis or plateletphoresis.

whose basic word it is supposed to be” (p. 84). In the present work, I have collected several examples of prefix-based BFs and established a separate category (Type VII) for them. Semantically, they are mostly based on the relation of negation, but not exclusively.

The last type, **Type VI** is typically represented by learned or technical words of classical origin. Pennanen comments on this type in the following way: “... a suffix-derived de-substantival word was introduced into English or formed on a neoclassical basis before the basic substantive had been introduced into English. In such cases the ‘lacking’ substantive would be formed by back-formation” (p. 108). Examples are: *homeopath* < *homeopathy*, *metallograph* < *metallography* (cf. Type II).

Pennanen gives a rather extensive analysis of compound verbs resulting within the first three types. This is because this type of verbs represents 47 % of all back-formed verbs in the author’s material. Pennanen connects a great number of compound verbs in Modern English resulting from the process of conversion or BF or direct compounding with a tendency to synthesis in English.

First of all, Pennanen calls attention to the long-lasting discussion about the existence of objective type of compound verbs in English (the ‘*law-break*’ type). Although the objective type of compound verb is against the genius of the English language, as he says, the percentage of such verbs in his material is rather high – 41.7 % of all composite back-formed verbs – while 48.5 % are compound verbs in which the first part qualifies the second in the manner of an adverb.

Within this category, Pennanen describes individual types according to the mutual syntactic relation between the two parts of the resulting back-formed compound verbs: subjective, objective, adverbial and predicative. An interesting answer to the question of why there are so many compound verbs when “the objective type is against the genius of the English language” is that these verbs are not the result of direct compounding, even if they are externally identical with real compounds, but they are the result of conversion or BF from compound nouns. So, we do not have \**to meat-eat* (from corresponding action noun *meat-eating* or agent noun *meat-eater*) but we have *law-break* – back-formed from *law-breaker*.

The relation between the two components of a compound is usually not affected in the process of BF, so we can derive it from the resulting verb in the same way as from the source noun (see *law-break* above). However, there are exceptions. Pennanen mentions, e.g., the verb *to moonlight* (< *moonlighter*) the meaning of which is taken over from the basic word in which the sense relation is not between *moon* and *light* but *moonlight* and *-er* the suffix. Similarly, the meaning of the verb *to flat-roof* (< *flat-roofed*) reflects the relation between the compound and

the suffix *-ed*. This shows two important facts: firstly, BF depends on meaning – it is not a mechanical clipping of a word and secondly, an objective type of compound base does not necessarily produce a BF verb of the same type.

Comparing conversion and BF in producing two-element verbs, the author comes to the conclusion that BF is as active and productive a pattern as conversion.

The three processes (conversion, compounding and BF) influence one another and this reciprocal influence plays an important role. Pennanen explains: “The existence of composite verbs of a given type, formed for instance by retrograde derivation, will encourage and facilitate the formation of similar verbs by other means of word-formation, e.g. by conversion or compounding, and vice versa” (p. 115). Some interesting examples are the verb *to chain-drink* (compound) based on the analogy of the BF *chain-smoke* and the verbs *to baby-tend* and *to phone-sit* (compounds) based on the model of the back-formed *to baby-sit*. This mutual influence is evidence of the synthetic trend in English.

The author offers a survey of existing parallel pairs of a back-formed verb and/or the corresponding agent noun, action noun, noun and verbal adjective, which may at any time give rise to the formation of verbs, of which he had not been able to find instances yet, e.g.: *\*skirt-chase* < *skirt-chaser*, *\*job – hunt* < *job-hunting*<sup>9</sup>, *\*war-separate* < *war-separated*.

In this connection, the author mentions so-called partial BFs – words the formation of which would actually presuppose a back-formed basis, usually verb, which, however, has not been instanced, e.g. *black-birder* (n.) < *black-birding* (verbal n.) – “a man or vessel engaged in kidnapping negroes or Polynesians for slavery”, *stenographer* (n.) < *stenography* (n.). He also mentions cases in which the process of conversion is activated by the co-existence of verbal-like derivatives formed from the noun about to be converted into a verb, e.g.: *cap* (v.) < *cap* (n.): *capped*, *capper* (“a cap-maker”), *roller-skate* (v.) < *roller-skate(s)* (n.): *roller-skating*, *roller-skater*.

Furthermore, the author gives interesting examples of verbs which are on the borderline between compounding and BF; he emphasizes the importance of the share of BF in the process: *blood-guilt* 1882 (~ *blood-guilty* 1597), *cub-hunt* 1870 (~ *cub-hunting* 1858), *psychopath* 1885 (~ *psychopathy* 1847). There are also prefixed verbs that bear resemblance to back-formation: *coexist* 1677 (~ *coexistence* 1646), *maladminister* 1705 (~ *maladministration* 1644).

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<sup>9</sup> *Skirt-chase* (OED4 1981) and *job-hunt* (OED4 1946) are attested in our material. A similar compound verb, which Pennanen did not include in his collection, *house-hunt* (1888), is presented in OED4 as preceding the occurrence of the derivative *house-hunting* (1896). Another, *cub-hunt* (1870) is classified by Pennanen among those which are on the borderline between compounding and back-formation.

Pennanen also draws attention to the fact that BF has had an important function in the process of introducing foreign words into English. These are usually nouns that either are or appear to the native speaker to be derivatives – and derivatives, both real and supposed, are the starting point of BF. Among such cases are Latin and French past participles used as verbs in English and Pennanen agrees with Marchand and several other authors that many of these verbs are due to BF from deverbal nouns in *-tion* and *-ation*, which were often much earlier in appearance than the participle and the verb. This also involves scientific and technical terms formed on the Neo-Latin basis from Latin and Greek elements, e.g. nouns and verbs in *-graph*, and the cognate nouns in *-grapher* and *-graphist* and adjectives in *-graphic* and *-graphical*. As Pennanen remarks, these words are compounds formed on the neo-Latin basis, but compounding has taken place under obvious influence by earlier derivatives from the same stem.

BF may also entail changes of meaning. There are cases in which the derived word has developed another meaning and this additional meaning was reflected back in the primitive word by a process that is similar to BF, e.g.: *aggress* (v., 1575) had the same meaning as the French verb *aggresser*: “to approach, march forward”. It has derived its second meaning “to make an attack” (1714) from the noun *aggression* “attack” (1611). The verb *excur* (1656, meaning 1 “to run out of forth, extend”) is in its second meaning (1850, “to take an excursion”) described as a BF by Marckwardt (1958); *vacate* (1643) in its American use “to spend a vacation” is apparently a BF from the noun *vacation* (1456).

Special attention in the monograph is devoted to the principal question: why are BFs formed? The author analyses the motive forces that have taken share in the overall motivation for BF as one of the processes of word-formation. Generally said, the main reason is to fill a gap in the vocabulary, in the case of BF this is a trend from a derivative to the primitive which is believed to be lacking. But more specifically, there are several more particular motives. One of them, an immediate need to express a concept, has produced really useful words that have remained among the basic stock of the language (*beg, kidnap, edit, burgle, injure, donate, dry-clean, televise, sunbathe, tape-record, wrinkle, spoonfeed, hen-peck, sightsee, greed, homesick, homeopath*, etc.)

Another interesting motivating situation that Pennanen describes is when BF is stimulated by contextual juxtaposition of a derivative and its back-formed resulting base, e.g.: *sculpt* (v., 1864): Reader 5 March: “...As to what sculptors argue...she makes them not less by painting than sculpture, because she both sculpts and colours.” Similarly creative are other two motive forces: parallelism of expression (i.e. one word in a given context is extended to a new formation immediately following) and the desire to produce rhyme.

A specific source of motivation may result from the desire for brevity as the back-formed words are usually shorter in comparison to the other possible ways of expressing the same idea. As an example the author gives the verb *burgle*, which has outgrown its early facetiousness and become generally current. The other possibility – *to burglarize* – a rather long verb, is not used (at least in British English) while the conversion verb *to burglar* has never gained currency. Pennanen describes such examples as illustrations of the principle known as economy of expression.

As far as compound verbs are concerned, Pennanen refers to Marchand's explanation why some back-formed compound verbs of the objective type are used by speakers despite the fact that verbs like *\*cardrive*, *\*taxpay*<sup>10</sup> are not acceptable. Marchand (1960) remarks that if the motivation of the compound is not transparent, the speaker is less likely to hesitate to use it, e.g. *bootleg*, *eavesdrop*, or *blackmail*.

The author also deals with the possibility to reverse the elements in the compound and refers to Preuss (1960), who provides examples of the change of meaning between the compound verb and the corresponding phrase, where the first element of the compound completing the verb in the phrase is not objective but has a different function, e.g. subject (*to ghost-write*), or adverbial (*day-dream*, *moon-light*, *vacuum-clean*, *cross-refer*, etc.) In all these cases the verb is analysable only into a prepositional phrase, but the meaning of this phrase is different from the meaning expressed by a back-formed verb. Thus the back-formed word is the only possible way of expressing the idea with a single word. This change in the semantic structure of the verb brings it often to the level of an exocentric compound, and *to moonlight* (“to have a second job that you do secretly, usually without paying tax on the extra money that you earn”) is a typical example.

The reason why compound participial adjectives whose first parts is an adverbial do not produce back-formed verbs like, e.g. *\*hard-work*<sup>11</sup>, or *\*well-mean* is the force of traditional linguistic habits, within which the phrases like *work hard* or *mean well* are very well-fixed and do not allow the compound words come into being.

From a stylistic point of view, Pennanen says, BFs are often colloquial, humorous, jocular, slangy or technical (*chauf*, *spinst*, *propaganda*, *shab*, *fruster*, etc.). Many of them are nonce-words and not likely to survive. Their producers, especially journalists, want to give a personal,

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<sup>10</sup> The verb *tax-pay* is not presented in any dictionary, but it is used in communication on several web-pages on the Internet, e.g. “Where we have savings accounts, as a general rule, we have to tax pay on any income from that savings account and any capital gains we make.” (<http://www.moneywise.co.uk/news-views/2008/03/05/your-isa-questions-answered>); accessed on 31.03. 2011.

<sup>11</sup> The verb *hardwork* has been used in the Internet communication (highly informal): “Hi everyone, it seems that a very long time haven't come here, i have no cars at presents , but i will try to hardwork , i prefer BMW, and Audi also good i think.” (<http://www.autocar.co.uk/blogs/designlanguage/archive/2007/10/17/led-running-lights-no-thanks.aspx>); accessed on 31March 2011.

inventive or creative flavour to their ideas – the newspaper style is a typical fruitful environment for coining BFs. On the other hand, newspaper reporting is not the only area of life where BFs come into being and are used. The author gives a survey of the various fields in which he found material for his analysis, e.g. law, church and religion, politics, business and trade, cattle-farming, crafts, domestic economy, medicine, science and technique, sports, aviation, everyday life, education and arts, psychology and the area of various abstract words. The earlier, mostly simple, BFs are rather close to practical life, the more recent ones, often compounds, are more typical of various areas of modern life.

Pennanen also deals with the question to what extent individual writers have contributed to BF and what use they have made of the BFs introduced either by themselves or by others. He mentions some well-known authors and the BFs they used, e.g. Chaucer (*jeopard* 1374) Wyclif (*law-break* 1382), Shakespeare (*numb* 1602), Burns (*heart-break* 1792), Byron (*fortune-hunt* 1824), Dickens (*opium-smoke* 1870), Faraday (*manipulate* 1827), Lewis (*shadow-box* 1924).

Based on the above analysis, Pennanen comes to a strong belief that BF is a definitely practical, close-to-life method of word-formation, which however does not prevent it from being used for learned, scientific or technical purposes. The motivation for its use is to create a word which is felt to be lacking, to achieve this in an economic way – a maximum expression with a minimum of effort, to find a personal, individual expression, which may be poetic, humorous or playful in its connotation. A BF becomes acceptable as soon as it has become fully institutionalized in the language, which means that it is taken for granted as a natural element in the vocabulary.

Pennanen furthermore deals with the question of survival of BFs in the language, especially of those items that are exposed to competition with the existing rivals of the same root - conversions and derivatives.

In this connection, he mentions, e.g., the best-known verb *to beg* < *beggar*: Its potential rival, the conversion verb *to beggar*, has a different meaning (“to make a beggar of”, “to exhaust the resources of, to go beyond”). Another interesting example is *to butcher* (BF) and *to butcher* (conversion): only the conversion verb has been preserved in the language (“to slaughter in the manner of butcher or in a brutal manner”), probably influenced by the existence of the related verb *to slaughter*<sup>12</sup>. Pennanen also cites examples of verbs that survived (for a certain time period) in all three forms, for instance the verbs *to pillory* (conversion 1600), *to pillor* (BF

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<sup>12</sup> Despite the fact that some authors explicitly reject the verb *butch* (e.g. Beard, 2001), it occurs in the Internet communication and is even recorded in the Urban Dictionary as ‘*butch it up*’ with the following definition: “Term used to encourage a specific traditionally masculine act or more generally masculine behavior in an effeminate acting person” (<http://www.urbandictionary.com/define.php?term=butch%20it%20up>; accessed on 31 March 2011). However, the meaning is transferred and the link between it and the noun *butcher* is not reliable at all.

1638), *to pillorize* (derivative 1646) coexisted for two centuries (p. 140). On the other hand, some back-formed verbs could have been expected to make it because of the next to no rivalry of possible conversion verbs, but they have not survived. Such an example is the verb *to biograph* – speakers prefer the expression “to write the life of”, in spite of the fact that existing analogical verbs based on the same process *-graphy* (noun) > *-graph* (verb) could have supported the BF verbs here. Some back-formed verbs have survived but they have continued to be used on their original colloquial or slang level (e.g. *to tute*, *to sculpt*).

In connection with a general mistrust of any linguistic innovation, including BF, of course, Pennanen, referring to the second edition of Fowler’s Dictionary, deals with some illustrative examples of verbs that have not reached a status higher than that of the colloquial level (e.g. *enthuse*, *reminisce*). Some others were criticized as unsuccessful, e.g. the verb *housekeep* for *keep house* (Eric Partridge, *Usage and Abusage*, 1948). Pennanen closes this issue by a remark that these innovations appear to be more popular in America than in Britain and that the great majority of the more recent BFs are of American origin. Finally he says: “In modern times the dissemination of novelties in language takes place on a global scale by means of modern mass-media from airmail editions of American journals and newspapers to intercontinental television programmes” (p. 144).

The author describes the stages through which BFs typically pass until they become part of the vocabulary: they arise in colloquial informal speech (especially in a newspaper article, a radio talk, a television programme and so on) and they often become the standard usage by means of some trade or occupation. Next they proceed through the vernacular of cultured conversation, “free from slang”, up to the last stage – written language, “richer in vocabulary and somewhat more old-fashioned in construction than the standard spoken speech.” This process is typical mainly of the USA. Pennanen refers to Bladin’s (1911) opinion that new formations are possible only where there exists a certain freedom from conventionalism. And the USA as a mixture of nations is flexible enough to deal with experiments. He also mentions the Elizabethan freedom and boldness in the use of language which the early settlers brought with them and which has survived into the twentieth century. But at the same time he speaks of the striking tendency in both British and American English, which is the trend towards clearness and brevity in expression. As some other authors (e.g. Marquardt, 1942) point out, there are several aspects cooperating with this tendency: the monosyllabic tendency of English and the principle of word-making adopted by the English speakers - maximum gain at minimum effort.

Pennanen also mentions another influential factor – the principle of functional performance, simply said, the more BFs become accepted into use on the various levels of the language, the

more new BFs may be expected to arise. He gives evidence of this by reference to the recent influx of back-formed pseudo-compound verbs into everyday spoken and written language.

In the development of various types of BFs over the centuries, there is a considerable difference between early and later BF: up to 1800 nearly 37 % of the total material recorded in his lists had been in existence by then, the majority being simple words (ca. 37 %). After 1800 the proportion of simplicia and composita is 48 % to 52 %. From the older stock of simple BFs more words have fallen out of use than survived. The older stratum of composite BFs, on the other hand has survived surprisingly well (*backbite, housewarm, kidnap, etc.*).

The more recent layer of simplicia-based BFs contains rather few everyday words of general character and a large number of professional, technical, learned or other special terms. The other category consists of humorous, colloquial or slang terms, very often nonce-words, which die soon after appearance.

The composite-based BFs after 1800 represent an attempt to express a complex idea with a minimum of linguistic material. Part of them have become a permanent part of the vocabulary, others are more or less at the stage of experiment. BF is one of the reactions of word-formation to the new demands made upon modern methods and means of expression.

Summarizing the main findings of his research, Pennanen concludes his study with the following principles (pp. 148-150):

- BF is based on the **inverted function** of the relation pattern of a radical word and its derivative.
- BF is based on “**metanalysis**” by the speakers, which may vary in degree – from a completely fictitious analysis of the word (“classical” type), e.g. *bant, maffick, quisle*, to correct analysis of real derivatives that admit of two-fold interpretation and are analysable on the basis of the foreign language that they are borrowed from.
- The principal motive force of BF is **analogy** of patterns. However, BF is not merely formal; central role of the semantic element should be borne in mind.
- The result of BF is a new word of the vocabulary and the decisive aspect of considering a word to be an addition to the vocabulary is its inner word-form. Then we can speak of **full BF**. If the change of the word-form is not complete, we get a **partial BF**, whose use is limited to certain forms only, or categories of formal or grammatical BF which produces new forms or variants of existing words, and **semantic BF**, which reflects additional meanings back to the basic word from a derivative.
- BF has a certain **share in other processes of word-formation**, particularly conversion and compounding and it may operate as sub-surface force in the process of introducing new

elements into English from other languages, e.g. the formation of English verbs from Latin and French past participles.

- BFs are **normally not recognized as such by the average speaker**. He regards them as synchronous phenomena of the language system; in this sense BF is relevant only in the diachronic aspect. On the other hand, there are speakers who deliberately employ a back-formed word, or even coin one.

- Words resulting from a recent BF process are **mainly compound verbs**. This illustrates the present-day need for nominal-verb compounds as a result of the striving for concise, pregnant expression.

- Back-formed compound verbs have **reinforced the formation of direct compounds and compound conversions** as these methods have reciprocally enhanced BF from compound bases.

- The formation of **nominal-verb compounds** is becoming active and productive again after a very long period of low productivity.

- With back-formed compound verbs, a certain **resistance to the object + verb pattern** is still felt in some cases, but in others, especially those of the adverb + verb type, it seems to be the only possible way of expressing a given idea.

- The coining of BFs is at present taking place **mainly in the US**, but this process is also active in Britain – at the various levels of spoken and written usage.

- The present **Elizabethan age** is remarkable for the great **activity in word-making**.

- BF is playing a **prominent role among the modern processes of English word-formation**.

## 5 BACK-FORMATION IN THE CZECH LANGUAGE

It should be stressed that BF is not a process confined to English. In the literature we can find references to it in connection with other languages. Alkire and Rosen (2010, p. 304), for instance, introduce examples in French and Spanish: “French extracts new singulars like *cheveu* ‘hair’ and *genou* ‘knee’ from plurals. Old Spanish *tiempos* < *tempus* ‘time’ became modern *tiempo* via the same process”. Fleischer (1995, p. 51) gives several examples in German, such as *sanftmütig* (adj.) > *Sanftmut* (n.) (“good-hearted” > “good-heartedness”) or *elastisch* (adj.) > *Elast* (n.) (“elastic” > “elastic substance”).

In keeping with the contrastive analysis tradition of the Prague School I thought it important to explore even this aspect and compare BF in English with the situation in Czech.

The objective of this chapter is, above all, to find answers to the following two questions:

1. Does a word-formation process which would be identical to the BF process in English occur in the Czech language?
2. Which word-formation procedures of the Czech word-formation system are marked by at least some general qualitative and/or quantitative features, peculiar also to BF in English and thus at least partially comparable to it?

By the general qualitative and quantitative features we mean the following phenomena:

- a) The direction of formation is opposite to the affixation – it is subtraction rather than addition of an affix – the qualitative feature.
- b) The number of morphemes in the resulting word is lower – the result of the process is a formally shorter word – the quantitative feature.

### 5.1 Deprefixation

The literature (e.g. Dokulil, 1962, Čermák, 1990, Mališ, 1999) introduces only several rare cases of deprefixation, which are to a certain extent comparable with English deprefixation: *ujářmit* > *jařmit*, *poslat* / *posílat* > *slát* / *silat*, *útes* > *tes*. Such words have mostly poetic or archaic connotation and are not used in common communication. Deprefixation occurs with a very low frequency in both Czech and English.

## 5.2 Desuffixation – searching for comparable types

### 5.2.1 Searching for a type comparable with the English type *editor* > *edit*

A type partially comparable with the English type *editor* > *edit* is in the literature (e.g. Dokulil, 1962, Šmilauer, 1971, Čermák, 1990) exemplified by the word *wátsac* (from German, „bag“). It was borrowed into Czech as *váček*, then, analogically after the type *rak* > *ráček*, *mrak* > *mráček*, the word *vak* was coined, i.e., formed by back-derivation. The following table gives a survey of common features of the two types; it also describes the differences between them:

COMMON FEATURES	
1. the longer source word was borrowed from another language	<i>wátsac</i> – from German <i>editor</i> – from French
2. the borrowed source word, adjusted to the native language, appears to be morphologically complex	<i>váč-ek</i> <i>edit-or</i>
3. application of analogy with formally similar types in the native language	<i>váček</i> : <i>ráček</i> : <i>mráček</i> ... <i>editor</i> : <i>creditor</i> : <i>actor</i> ...
4. desuffixation: the result is a word morphologically simpler, formally shorter	<i>váček</i> > <i>vak</i> <i>editor</i> > <i>edit</i>
DIFFERENCES	
1. Czech: the source and the newly-formed word belong to the same part of speech English: the source word and the newly-formed word belong to different parts of speech	diminutive noun > noun noun > verb
2. different frequency of occurrence of this type in the given language: in Czech only a single case of this type is introduced in the literature (see above); in English the given type is represented by a fairly large group of words	e.g.: <i>sculptor</i> > <i>sculpt</i> , <i>butler</i> > <i>butle</i> , <i>peddler</i> > <i>peddle</i> , <i>beggar</i> > <i>beg</i> , <i>burglar</i> > <i>burgle</i>
3. unlike Czech, this type of word-formation applies also to other word-formation types and suffixes in English	e.g.: <i>expletive</i> > <i>explete lazy</i> > <i>laze</i> , <i>recycling</i> > <i>recycle</i> , <i>reminiscence</i> > <i>reminisce</i> , <i>television</i> > <i>televise</i> , <i>therapist</i> > <i>therap</i>

Table 1: Common features and differences of the types *editor* > *edit* and *váček* > *vak*

### 5.2.2 Searching for a type comparable with the English type *house-keeper* > *house-keep*

As far as another highly frequent English type, *house-keeper* > *house-keep*, is concerned (a compound verb back-formed from a compound noun), Stašková (2008) suggests that what seems to be the formally closest counterpart to this process is the Czech type *dřevorubec* (“wood-cutter”). The noun *dřevorubec*, which results from two, simultaneously realized, processes – composition and suffixation, has an identical morphological structure as the English noun in the BF pair which functions as the source word (*house-keeper*):

<i>dřevo·rub·ec</i>	components: noun ( <i>dřevo</i> ) + suffixed noun ( <i>rubat &gt; rub·ec</i> ); the relation between the components is objective the second component does not exist in the Czech language as a word on its own; the compound is an agent noun
<i>house·keep·er</i>	components: noun ( <i>house</i> ) + suffixed noun ( <i>keep &gt; keep·er</i> ); the relation between the components is objective the second component exists in English as a word on its own, but in the given context is not used independently (*a <i>keeper of a house</i> , but e.g. <i>a keeper in museum / library / zoo</i> ); the compound is an agent noun

Table 2: Czech *dřevorubec* vs. English *housekeeper*

At this point the comparability of these two types ends, since the next step in the formation of a compound verb is only realized in the English type, namely the desuffixation of the compound noun resulting in the compound verb *housekeep*. If we imagined this next step hypothetically also with the Czech type, it would finally look as follows:

*dřevorubec > \*dřevorubat*<sup>13</sup>

This would correspond to BF, i.e. subtraction of the word-formation suffix. However from the quantitative-formal point of view, the formal shortening of the source word (as occurs in English) cannot obtain in the Czech language; the word-formation suffix would be substituted by verbal root-forming suffix (= resuffixation) and the formal length of the word would not actually change.

At the same time, it is necessary to point out that certain compound verbs do exist in Czech; Čermák (1990) introduces two such examples: *zadostiučinit* (“give satisfaction”) and *blahořečit* (“bless”). This type, however, is a loan translation from German and is seen as a result of composition rather than BF. The author furthermore mentions some more recent compound verbs, *znovuvybudovat* (“build again”) and *spolupůsobit* (“act together”), another example is *znovuvyvolat* (“evoke again”). These, however, are not the result of BF either, but of composition, involving combining forms *znovu-* (“again”) and *spolu-* (“together”).

### 5.2.3 Formation of Czech verbs from borrowed action nouns

There is, however, another process which deserves attention as it resembles BF of English verbs from a simple, or (more often) compound and at the same time suffixed, action noun, such as: *jogging > jog*, *lip-reading > lip-read*. What I mean by this process is the additional formation of verbs in the Czech language from borrowed action nouns which have been borrowed as a

<sup>13</sup> The verb “*dřevorubat*” is not recorded in any official Czech dictionary, but appears to be used ad hoc by native speakers of Czech: “Osobně se ale musím omluvit, poprvé tam budu chybět, máme na zahradě několik lehlých stromů, budu celý víkend dřevorubat...” (see <http://www.rcfogli.cz/modules.php?name=Forums&file=viewtopic&p=26361>; accessed: 9 April, 2011)

whole (and orthographically adjusted). These are nouns borrowed from various languages, e.g. from German (*verbuňk* > *verbovat*, “recruit”), Latin (*referát* > *referovat*, “report”, *agitace* > *agitovat*, “agitate, campaign”, *abstrakce* > *abstrahovat*, “abstract”, *konverze* > *konvertovat*, “convert”), French (*blamáž* > *blamovat*, “make a fool of”), or English (*trénink* > *trénovat*, “train”). It holds here again that this involves only similarity of the processes, not identity. Common features and differences are listed in Table 3:

COMMON FEATURES	
1. the source word is an action noun in both languages	Czech: <i>trénink</i> English: <i>jogging, lip-reading</i>
2. the result is a verb in both languages	Czech: <i>trénovat</i> English: <i>jog, lip-read</i>
3. a word-forming suffix is subtracted from the source word (desuffixation)	<i>trénink</i> > <i>trén-</i> <i>jogging</i> > <i>jog, lip-reading</i> > <i>lip-read</i>
DIFFERENCES	
1. Czech: the source word is always a borrowed word English: the source word is a borrowed or native word	<i>trénink</i> (from English) e.g. <i>aggression</i> (from Latin), <i>jogging, lip-reading</i> (native)
2. Czech: the borrowed source noun is always simple and suffixed English: the borrowed source noun is simple or compound (more often); and suffixed	further examples: <i>referát, agitace, konverze</i>  further examples: <i>accreditation, double-glazing, back-formation</i>
3. Czech: desuffixation (word-forming suffix) + new suffixation (verbal root-forming suffix + ending) English: simple desuffixation (BF)	<i>trénink</i> > <i>trén-</i> > <i>trén-ovat</i>  <i>jogging</i> > <i>jog, lip-reading</i> > <i>lip-read</i>

Table 3: Common features and differences in the process of formation of verbs from action nouns

The procedure thus consists in the Czech verb, belonging most often to the grammatical paradigm „kupuje“, being formed from the base of a foreign noun. It is, actually, resuffixation; however the new, verbal, suffix is strongly de-semanticized (Čermák, 1990) and can appear (in the inflectionally rich Czech language) only as a necessary grammatical formal means to indicate a verb. From the perspective of such an approach, we can see this process to be closer to what constitutes the essence of the process in English.

#### 5.2.4 The present tendency from the point of view of vocabulary dynamism (*leasing* > *leasnout*)

Over the recent period (of 10 to 15 years), changes in the Czech vocabulary have been marked by a fairly high dynamism. Apart from other things there has been an increase in the quantity of borrowed words and phrases from English, especially as a result of the development of new forms of communication (the Internet), development of such fields as computing, banking, financial engineering, marketing, advertising, etc. Contemporary tendencies are characterized in, e.g., the dictionary of neologisms, *Nová slova v češtině* 1 and 2 (Olga

Martincová et al., 1998, 2004), where the authors also speak of the “incompleteness” of many neologisms and of their form-variation. This is also typical with regard to one of the tendencies connected with our topic: the use of some English action nouns in their original orthographic form (*leasing, dealing / dealer*) and subsequent formation of verbs with Czech morphological characteristics (*leasnout (si), dealovat*). Speakers even “adapt” some words, based on their formal resemblance with the native words, which, however have a different meaning (*hacking / hacker* > *hackovat* > *hákovat*, *harassment* > *harašení* > *harašit*). Their use in this new meaning can be often viewed as a metaphor: *hákování* computing slang = illegal infiltration of other people’s computer systems - not to be mixed up with *hákování* in ice-hockey terminology, which is a calque from the English ‘to hook’; *harašení* = making not very violent but still disturbing sounds, *harašení* from English *harassment* = uninvited and unwelcome verbal or physical behaviour of a sexual nature especially by a person in authority toward a subordinate (as an employee or student). It is necessary to emphasize that most of these words have appeared as occasional, slangy, or informal expressions. Nevertheless, this word-formation process is not entirely new in the Czech language (see *trénink* > *trénovat* above), and it could continue and result in the assimilation of these words in standard language. From the formal point of view, this process involves resuffixation, i.e. first desuffixation of the source action (or agent) noun followed by new suffixation by means of a verbal suffix. Therefore, it is a process partially comparable with English BF. Further examples of a similar type are: *hosting* > *hostování* > *hostovat* = (computing slang) “provide companies and individuals with space on a server, allow them to register their domains there”; *browsing / browser* > *browsení* > *browsit* > *brousit* = (computing slang) “to browse through web pages”; *carving* > *kárvovat* = “to ski on carving skis, to use the carving technique”, etc. (Stašková, 2008).

### 5.2.5 Simple desuffixation accompanied by the change of formative characteristics

Simple desuffixation rarely occurs in the Czech language, namely in words with an emotional or stylistic connotation. A frequently mentioned example of this process (e.g. Daneš, Dokulil, Kuchař, 1967) is the word *mizerný* > *mizera* (“villain”), belonging to the word-formation category of names referring to persons of a certain character. This process may, however, involve other word-formation categories as well. Formation of this type proceeds in the following way:

1. The source word is an adjective derived by the suffix *-ný*
2. The complex stem of the source adjective loses the last stem-forming suffix *-n-* (+ ending): *mizer-ný* > *mizer-*

3. This back-derived word is a noun, the change of the part of speech is reflected in the change of the formative suffix (this is not a formation suffix though, therefore it is not resuffixation): *mizer-a*

The source adjectives for the masculine nouns formed in the process can also be derived by other suffixes, e.g. *-ní*, *-ický*, *-ký*. The class also includes some borrowed nouns. Examples of this word-formation type include *mizera*, *dareba*, examples with a zero suffix: *impotent*, *fanatik*, *flegmatik*, *exot*, *fantasta*. Some nouns belong to both genders; these are emotionally tinged nouns formed from the primary stems of qualifying adjectives, derived mainly by the suffix *-ný*: *čiperá*, *ničema*, *ohava*, *ohyzda*, *protiva*; or relation adjectives: *nemrava*; or action adjectives: *nemluva*, *neposeda*, *nepozora*. Nouns formed from adjectives ending in *-ský*, *-atý*, *-aný*, *-elný*, *-ený*, *-ovný* are less frequent: *nelída*, *nestyda*, *náfuka*, *necita*, *popleta*, *nešika*. Nouns from borrowed source adjectives are even rarer: *naiva*, *nervóza*.

As far as back-formed feminine nouns of this type are concerned, they are almost exclusively nouns borrowed from Latin, having more frequent synonyms in Czech derived by a native suffix, especially *-ní*. These are mainly names of things, e.g. *centrální* > *centrála*, abstract entities, such as *konstanta*, or technical names of speech sounds: *dentála*, *labiála*, and others.

Czech agent nouns refer to persons doing an activity according to the object to which the action is related. The source word here is a noun. There are several types:

1. a) The source word is the name of a field ending in *-ie*, the back-formed noun refers to a respective professional, e.g.: *antropologie* > *antropolog*; other examples: *patolog*, *psycholog*; *ekonom*, *filozof*, *chirurg*, *psychiatr*.  
b) nouns ending in *-graf*: *geograf*, *fotograf*, *scénograf*.  
c) nouns referring to persons of a particular type ending in *-fil*: *bibliofil*, *germanofil*; *-fob*: *germanofob*, *anglofob*; *-man*: *megaloman*, *pyroman*; *-pat*: *psychopat*, *homeopat*.
2. Terms for a professional field ending in *-ika* > a professional person: *pedagog*, *atlet*, *mim*.
3. Terms for a professional field ending in *-ist-ika* > a professional person, noun ending in *-ista* (“předseda” paradigm): *lingvista*, *komparatista*, *slavista*, *urbanista*.

Another type belonging to this class involves nouns referring to persons who are involved in a political movement, or belong to a particular social class. In terms of BF, there are two groups of nouns formed from compound nouns of Greek origin containing *-kracie* and *-archie* as their second element. After the subtraction of the suffix, a noun is back-formed referring to a person: *demokrat*, *aristokrat*, *byrokrat*, *oligarch*, *hierarch*.

Another interesting type includes nouns which refer to young animals and which are back-formed from the names of adult animals, e.g. *hřibě* < *hřebec*.

This class also comprises names of chemical elements formed by desuffixation from borrowed nouns. The process consists in the simple subtraction of the Latin suffix (there is also a change in the gender as a result of the new ending, namely from Latin neuter to masculine nouns). Váhala (1967) introduces four types:

1. *-us*: *fosfor* (< *phosphor-us*)
2. *-um*: *bór* (< *bor-um*), *bróm*, *fluór*, *chlór*, *chróm*, *jód*, *kobalt*, *mangan*, etc.
3. *-ium*: *molybden* (< *molybden-ium*), *niob*, *selen*, *telur*, *titan*, *uran*, *vanad*, etc.
4. *-icum*: *aržén* (< *arsen-icum*)

### 5.2.6 Desuffixation followed by a new suffixation – resuffixation

This combined procedure is more frequent in the Czech language than simple desuffixation. A typical example, given in the literature most often (e.g. Dokulil 1962, Dejmek 2002, and others), is the noun *bohác* < *bohatý* (adj.). The procedure is as follows:

1. The source word is an adjective derived by the suffix *-atý*.
2. Desuffixation consists in the removal of the stem-forming suffix *-at-* (+ ending *-ý*): *boh-atý* > *boh* (= the return to the root).
3. Addition of a new word-formation suffix - resuffixation: *boh-ác*.

The suffix *-ác* formations, especially nouns referring to persons of certain characteristics from the primary stems of adjectives, are mainly derived by the suffix *-atý*, or *-natý*, and are usually semantically linked to a certain part of the body. Such nouns are mostly colloquial or slang expressions (often derogatory): *bradáč*, *noháč*, *břicháč*, *hrbáč*, *ramenáč*, *vousáč*, *paroháč*, but they also include nouns belonging to technical terminology, e.g. *strakáč* (zoology: a species of a butterfly, *Endromis versicolora*, also known as Kentish Glory, or a breed of rabbit), furthermore, e.g., names of containers, e.g. *ucháč*, or colloquial names of animals: *šupináč* (a kind of carp).

This process also involves other adjectives and suffixes, which produce nouns of other word-formation categories with other derivational suffixes. A fairly numerous and diverse is the group of nouns ending in *-ák*: the nouns usually refer to persons of certain characteristics; they are often emotionally charged, slangy, or even vulgar and highly informal, with counterparts in multi-word phrases. The group includes persons: *silák*, *darebák* (< *-ný*), *nezdvořák* (< *-ilý*), *levičák* (< *-ový*), *maloměsták* (< *-ský*), *paličák* (< *-atý*); things, meals: *nulák*, *bramborák* (< *-ový*), *burák* (< *-ský*), *dřevák* (< *-ěný*), *zimák* (< *-ní*); metaphorical names of films (“tearjerkers”):

*sladák, doják* (< -ký, -emný<sup>14</sup>); names of drinks: *ležák* (< -íci) – “lager”; metaphorically also referring to goods not selling well (“lying”). Other suffixes in this group are -as: *prudás, klidás* (< -ký, -ný) – a person of a certain disposition; *kladás* (< -ný) – a slang noun referring to a “goodie” character in fiction; names of plants (“conifer”): *jehličnan* (< *jehličnatý*); -avec: persons – *krasavec* (< -ný); -če: fruits – *rajče* (< *rajské jablko*), -ek: results of actions, mostly with a prefix - *výstřížek, skrojek* (< -emý); -ina: persons – *dětina* (< -inský), geographical places - *rovina* (< -ný), *hlubina* (< -oký), *nížina, hladina* (< -ký); woods – *dubina, bučina* (< -ový), things – *pružina* (< -ný), materials – *sladina, kapalina* (< -ký, -ný); attributes - *doktořina, krejčovina, haškovina, švejkovina, bláznovina* (< ský) – this type can also be interpreted as a product of simple desuffixation of nouns referring to persons; -ka: tools - *rákoska, průvodka* (< ový, -ní); diseases - *kopřivka* (< ový); books - *příručka, detektivka* (< -ní); attributes - *dálka, šířka* (< eký, -oký), mineral waters – *poděbradka, luhačovka* (< -ský, -ický). In this group there are also many substandard, especially slang feminine nouns equivalent to standard multiword phrases (similarly as with masculine nouns ending in -ák, see above); in addition to -ka, e.g. *česnečka, hokejka* (< -ová), there are -na: derogatory names of women, e.g. *drbna* (< *drbavá žena*), *chlubna* (< *chlubivá* ~); and -oun: mainly derogatory names of persons: – *zrzoun* (< -avý), *slizoun* (< -ský).

Examples of nouns derived by resuffixation from nouns include names of persons according to their domicile: -ák, *Humpolák* (< *Humpol·ec*), *Vršovák* (< *Vršov·ice*); names for houses, cottages: -na, *myslivna* (< *mysliv·ec*); names of hospitals: -inec, *blázinec* (< *bláz·en*); attributes: -ství, *opilství* (< *opil·ec*); diminutives: -ka, *lobelka* (< *lobel·ie*).

Nouns derived by resuffixation from a verb describing action are exemplified by -ba: *kresba* (< *kres·lit*).

Examples of adjectives derived by resuffixation from nouns: relation to a class: -ský, *obrozenský* (< *obrozen·ec*); relation to a place: *minský* (< *Min·sk*), *sanfranciský* (*San Francis·co*), *newyorský* (< *New Yor·k*); relation to celestial bodies and natural phenomena: -ný, *slunný* (< *slun·ce*); relation to instruments: -ní, *pokladní, spořitelní* (< -na); chemical compounds: -itý, -atý, *hlinitý* (< *hlin·ik*), *vápenatý* (< *vápn·ik*).

Examples of adjectives derived by resuffixation from adjectives: comparatives -ší, *kratší, další, hlubší, širší*, etc. (< -ký, -eký, -oký); diminutive adjectives -ounký, -oučkový: *kraťounký, nizoučkový, droboučkový* (< ký, -ný); intensifying adjectives -ánský: *ukrutánský, hrozitánský* (< -ný).

<sup>14</sup> “*Doják*” is apparently formed analogically after “*sladák*” but here BF is followed by one more process – clipping: so: *dojemný* (adj.) > *dojem* (n., = BF) > *doj-* (=clipping) > *doják* (= resuffixation)

Examples of adjectives derived by resuffixation from adverbs – the last vowel of the adverb (indicating the part of speech) is subtracted: *-ejší: tehdejší (< tehd-y), protější (< prot-i), včerejší (< včera), -ní: dolní (< dol-e)*.

Examples of adverbs derived by resuffixation from adverbs: comparatives *-ej, -ěji: širěji (< šir-oko / šir-oce) hlouběji (< hlub-oko / hlub-oce)*.

Examples of verbs derived by resuffixation from adjectives – the stem-forming suffix is at the same time word-formative: indicating change of state of the agent *-nout, krotnout (< krot-ký), hubnout (< hub-ený)*; indicating change of state of the patient *-it: krotit, sladit (< -ký)*.

The above selection of examples is not, of course, a complete survey of all words formed by resuffixation. A more detailed description and the full list of relevant words is to be found in the literature (e.g. Daneš, Dokulil, Kuchař, 1967, Čermák, 1990, Mališ, 1999).

### 5.2.7 Formation from roots of verbs - resuffixation

Another combined process, part of which is the removal of a suffix, is a process similar to the previous one, namely formation of words, most often nouns, from the primary stems of verbs. What is removed in this process is the stem-forming suffix. A representative example is an agent noun *kupec (< kupovat)*, where the procedure is as follows:

1. The stem of the source verb contains two morphemes – the root (= the common part of the present and past stem) and a verbal stem-forming suffix (which is followed by, e.g., the infinitive suffix *-t* or the formative suffix *-l*): *kup-ova-t (kup-uje)*.
2. The removal of the stem-forming suffix produces the root: *kup-ova-t > kup-*.
3. The root is expanded by the word-formation suffix and the result is a derived word (resuffixation): *kup-ec*

This formation is often accompanied by sound changes. The most frequent outcome is agent nouns referring to persons, or other living beings according to the characteristic action. Examples of agent nouns derived from roots of verbs include persons: *-ant, pracant (< prac-ovat)* with a colloquial connotation; *-ce, rádce (< rad-it); -ec: letec (< lét-at); -čík: plavčík (< plav-at), -oun: řvoun (< řv-át)* – mostly pejoratives; *-or: kontrolor (kontrol-ovat)*; animals (pearl oyster): *-ka, perlorodka (< rod-it)*.

Other examples of such nouns are instruments: *-ák, držák; -ec, bodec; -ivo, barvivo*; places: *-na, herna*; fees: *-né, startovné*; actions: *-ba, střelba, -ot: pískot*; results of actions: *-ka, zarážka, -ek: výtažek*.

Adjectives derived from primary stems of verbs are exemplified by the suffixes *-ný*: *plynný* (“fluent”, e.g. speech); *-atý*: *nestydatý*; *-utý*: *visutý*, *smrdutý*.

Verbs derived from primary stems of verbs are often formed only by the removal of the stem-forming suffix of a perfective verb + suffixation by a stem-forming suffix, accompanied by a sound change, and result in an imperfective verb: *koup-it* > *kupovat*, *rozděl-it*, > *rozdělovat*, *rozdílet*, *sad-it* > *sázet*, *splat-it* > *splácet*. In such cases, only meaning is usually modified, less often changed, e.g.: *sklo-nit* > *sklánět*, but *sklon-it* > *skloňovat*.

### 5.2.8 Univerbisation followed by resuffixation (or desuffixation)

Univerbisation of multi-word expressions is a very active process in Czech. However it is not in itself a special word-formation process; it is only a modification of an already completed name which combines certain word-formation processes. In univerbisation, the modifying member (usually adjective) of the fixed phrase is resuffixated. After the removal of the suffix a new word-formation suffix is added, most often *-ák*, (*-ař*), *-ka* (*-ice*), *-ko*. The result is a noun referring to, e.g. a thing (*řidič-ský průkaz* [driving licence] > *řidičák*, *diplom-ová práce* [MA thesis] > *diplomka*), person (*zaměstnanec stěhov-ací služby* [removal man] > *stěhovák*), instrument (*kontrol-ní světlo* [pilot light] > *kontrolka*, *ruč-ní brzda* [hand brake] > *ručka*), or place (*Karl-ovo náměstí* [Charles Square] > *Karlák*). In such pairs, the univerbised noun is usually colloquial or slangy, e.g. *dopravák* (traffic cop), *oční lékař* (eye doctor), but exceptionally standard, e.g. *pravák* (right-hander), *zubař* (dentist). Univerbised names are marked by a lower informative value, e.g. *dálkař* (the full form can be either *dálkový student* “external student” or *dálkový řidič* “long-distance driver” or *skokan do dálky* “broad jumper”); *osobák* (in full either *osobní vlak* “passenger train”, or *osobní rekord* “personal record”), etc.

Another type of this process is a specific kind of univerbisation which differs from the previous one in that desuffixation is not followed by resuffixation. Čermák (1990) introduces two examples: *charakter-ní člověk* > *charakter*, *dvoutakt-ní motor* > *dvoutakt* (two-stroke engine). This type also includes informal descriptive names of car models which have been recently introduced by the car industry; they reflect the number of doors that cars can have (i.e., two, three, four, and five respectively): *dvoudvř*, *trídvř*, *čtyřdvř* and *pětidvř*. In speech the concrete meaning of any of the above expressions is usually bound to a concrete context or to the shared knowledge of the respective technical terminology.

### 5.3 Word-formation without a suffix – so-called conversion in a broader sense

Conversion is generally described as the transition of a word from one part of speech to another without the use of word-formation suffixes. In the Czech literature, the approaches to conversion are not unified. As a result, Czech scholars distinguish conversion in a broad and in a narrow sense (e.g. Petr et al., 1986, Čermák, 1990). Conversion in a narrow sense is defined as the change of part of speech without the change of the word-form. In Czech, this mostly applies to substantivisation of adjectives (*pracující, vrátný, dovolená*, etc.) or, for example, change of noun-forms into adverbs (*celkem, kolem*), or interjections (*hrome*). Such an approach is close to what is understood as conversion in English. Conversion in a broader sense, on the other hand, is defined as the change of the grammatical characteristics of the word, in which the suffixes involved are not derivational, but only part of speech and stem-forming ones (e.g. Dokulil, 1962, Dejmek, 2002). Some authors do not use the concept of conversion at all and place cases of conversion in a broader sense under suffixation / desuffixation / resuffixation (e.g. Malíš, 1999).

If we recall the two conditions for the inclusion of the Czech word-formation processes in the list of processes comparable with English BF (removal of the suffix and formal shortening of the word), it seems that conversion in a broader sense is, to a certain extent, relevant, since it is always accompanied by the removal of a suffix. In the case of conversion, the suffix is not derivational but grammatical, and it is then replaced by another grammatical suffix. For example, the removal of one part-of-speech suffix may be followed by the addition of another one: *zlý > zle* (= adj. > adverb), or by the addition of the verbal stem-forming suffix: *lyže > lyžovat* (= noun > verb), or the removal of a verbal stem-forming suffix may be succeeded by the formation of a noun with a zero derivational suffix: *honit > honØ* (verb > noun). In the last example, the external form also meets the second requirement – the derived word is (or looks like) formally shorter. Other examples of words formed by conversion, where the resulting word (in the case of a zero suffix) is formally shorter include:

a) *lovit > lov*: derivation of a noun from a verb by subtraction of the verbal stem-forming suffix (and the infinitive ending *-t*) and its substitution by a formative characteristics, here: the Ø ending. The root remains intact;

b) *pracovat > práce*: derivation of a noun from a verb by subtraction of the stem-forming suffix (and the infinitive ending *-t*) and its substitution by a formative characteristics, here: part-of-speech suffix *-e*. There is alteration of the length in the root;

c) *modrý > modř*: derivation of a noun from an adjective by subtraction of the part-of-speech suffix and its substitution by Ø suffix. There is sound alteration in the root.

Other examples according to the word-formation type include agent nouns: *zvědět* > *zvěd* (to spy > a spy), *špehovat* > *špeh* (more often connected with composition: *lidojed*, *dřevokaz*, *darmošlap*); agent nouns wherein the source word of the Greek/Latin origin refers to a scientific field, the converted nouns refer to human specialists: *botanika* > *botanik* (botany > botanist), *optik*, *fyzik*, etc.; names of means/instruments: *léčit* > *lék*, *zamknout* > *zámek*, *brzdít* > *brzda*; names of persons of a particular character converted from compound nouns (bahuvříhi): *rudovousý muž* > *rudovous* (red-bearded man > Redbeard); names of places converted from adjectives: *pustý* > *poušť*, *suchý* > *souš*; names of actions converted from verbs: *skočit* > *skok* (to jump > a jump), *hodit* > *hod*, *soutěžit* > *soutěž*; names of actions converted from prefixed verbs: *přehodit* > *přehoz* (to cover > a cover), *vydržet* > *výdrž*.

#### 5.4 Mechanical shortening

Some other cases could seem to fulfil the two conditions for BF, namely those in which the resulting word is formally shorter and usually morphologically simpler – the suffix is often removed. However, they do not involve a morphological process as the cases that seemingly fit the bill are subject only to surface, formal shortening: it is not determined by morpheme structure – the subtraction line may be between two arbitrary syllables (and the removal of a suffix is accidental). The result depends on the speech habits of the speakers or the onomatopoeic factor; the meaning is not cognitively changed, only modified. In fact, almost exclusively, these words are strongly stylistically or emotionally coloured – they are colloquial, argotic and slang words, hypocorisms, and mechanically shortened borrowed words, e.g.: *učitelka* > *úča*, *kriminál* > *krim*, *nashledanou* > *nashle*, *Magdaléna* > *Magda*, etc. This word-formation process is essentially identical with clipping in English.

#### 5.5 Conclusion

Based on the above description of Czech word-formation processes which are marked by at least two features assumed to characterize BF (the direction of formation is opposite to suffixation, the new word is morphologically simpler and formally shorter), it is possible to answer the questions posed at the beginning of the chapter and make the following conclusions:

1. **A morphological process that would be entirely identical to English back-formation does not exist in Czech.**

2. There is, nevertheless, **a comparable phenomenon** in Czech – characterized by the removal of the word-forming suffix and by the formation of a morphologically simpler word –

that can be referred to as **BF** (as in English), but **the word-formation types involved are different** from those formed in English BF.

The Czech type which is closest to the most common types in English is represented by only one Czech word: *vak* (sack). However, the type differs, above all, in the grammatical and semantic characteristics of both the source and the resulting word: while the English agent noun (*editor*) becomes a verb (*edit*), the Czech diminutive noun referring to a thing (*váček*) becomes a noun referring to a regular sized thing (*vak*).

Another common English type – a compound-suffixed agent noun (*housekeeper*) undergoes desuffixation to become a compound verb (*housekeep*) – does not occur in Czech. The closest Czech type goes through the first step of this process only: composition + suffixation producing an agent noun (*děvorubec*) does not proceed to desuffixation and the action is not expressed by a compound verb (at least in standard Czech). Instead it is expressed by a phrase composed of two source words which originally motivated the compound (*rubat dřevo*). This process can be partially compared in Czech to the BF of verbs and the addition of a verbal suffix (resuffixation) from borrowed action or agent nouns (*trénink > trénovat*). In connection with the increased borrowing of words and expressions from English over the last 10 to 15 years, other English action verbs have emerged in the Czech vocabulary (as neologisms), following the same pattern as the older type *trénink > trénovat*. This is a modern tendency to form verbs by a Czech verbal suffix from foreign nouns retaining their foreign orthography (*leasing > leasnout*). Sometimes the adaptation takes place, though based on the analogy of formally similar, but semantically different, existing Czech words (*harassment > harašení > harašit*). The verbs formed in such a way are mostly slang or colloquial and they are not entirely established in the Czech vocabulary yet.

BF is represented in Czech word-formation, above all, by desuffixation accompanied by the change of formative characteristics. While the result of BF in English is generally a verb (simple or compound), back-derived from an agent or action noun (less frequently from an adjective), in Czech the range of possibilities is more diversified. In addition, the resulting words (as in English) are very often emotionally or stylistically marked. The most frequent types are the following word-class pairs: adjective > noun (e.g. *mizerný > mizera*, *fanatický > fanatik*) and noun > noun (e.g. *antropologie > antropolog*, *atletika > atlet*). The resulting words are mostly agent nouns or names of persons of a particular character. As we will see later in the analysis of English BF based on Pennanen's typology, these two types stand closest to Pennanen's Types IV and VI respectively. There is one special group which includes names of elements created from foreign names (*borum > bór*). Other processes involve desuffixation as one of the steps.

The removal of the suffix in the source word is followed by new suffixation or resuffixation (e.g., *bohatý* > *boháč*, *široký* > *šířka*, *slunce* > *slunný*). Subtraction of the verbal stem-forming suffix followed by suffixation takes place in the formation of nouns from verbs (*létat* > *letec*). In all these cases it is formation from the root of the source word. Another process connected with resuffixation (and exceptionally also with desuffixation) is univerbisation (*tělesná výchova* (physical education) > *těláč*, *dvoutaktní motor* > *dvoutakt*). The newly formed words are prevalingly colloquial, pejorative or slang words. Conversion in a broad sense is clearly grammatical resuffixation – the grammatical suffix is removed in the change of grammatical characteristics of the word and then another grammatical suffix is added; in some cases it is a zero suffix (e.g. *mluvit* > *mluva*, *honit* > *hon*, *modrý* > *modř*). Word-formation suffixes do not take part in this process. Mechanical shortening of Czech words (a counterpart of English clipping) also produces formally shorter and morphologically simpler words; however, it is not strictly speaking comparable to BF.

## 6 ANALYSIS OF THE DEVELOPMENT OF ENGLISH BACK-FORMATION IN THE 20<sup>TH</sup> AND EARLY 21<sup>ST</sup> CENTURY: INTRODUCTION

The situation in the first half of the 20<sup>th</sup> century was described and analyzed by Esko V. Pennanen in his *Contributions to the Study of Back-Formation in English* (1966). Several other linguists have dealt with BF since the middle of the 20th century (see Chapter 3), but always within a larger work focused on morphological process in general and describing BF as one of the minor ones. Biermeier (2008) mentions Pennanen's classic study as the main authority in the field of BF and the only comprehensive study on this topic so far. Since the process of BF still continues producing new items of vocabulary at present, it must be seen as productive and so deserving further attention. The fact that the comprehensive investigation of this process had practically ended in the 1960s and had not been followed by any author in the same extent since then became the main reason for the present research and analysis. It is expectable that, as a result of constant flux of language, some words, for example, could not be identified as BFs in the first half of the 20<sup>th</sup> century yet as they may have existed in everyday spoken communication only and were not recorded in any text or dictionary at that time. Many potential back-formed words from existing sources only "waited" for their need in language and were introduced in communication much later than their respective source words – in the second half of the 20<sup>th</sup> century. In addition, new words came into being as neologisms reflecting thus progress in social life, sciences and technology. Many of these neologisms are again sources of potential BFs which might be recorded in the future.

The description and analysis of the situation over the whole of the 20<sup>th</sup> century till the present time is based on the total sample of 708 items. It consists of four smaller samples:

- a sample of 225 back-formations collected by Pennanen in his study (1966) for the first half of the 20<sup>th</sup> century (1900 - the early 1960s)
- an additional sample of 246 back-formed items collected and analyzed in the present follow-up research of the same period
- a sample of 229 most recent items 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.

In his collection, Pennanen used several sources, namely dictionaries (both general standard and dialectal), newspapers and magazines. Therefore, he included in his list also such items that occurred just as nonce-words and had not been confirmed by any dictionary.

As far as my own samples of BFs are concerned, except for the last sample of 8 newly revealed ones, I focused my attention on such items which have been institutionalized, i.e. those which are recorded in dictionaries and explicitly described as back-formed. The material has been gathered from a different set of dictionaries than that used by Pennanen, moreover from dictionaries that have been substantially updated, the oldest in 1995, the latest in 2009 (see the References). The excerpted dictionaries include *Concise Oxford Dictionary 9th Edition* (further referred to as COD 9<sup>th</sup>), *Concise Oxford Dictionary 11th Edition* (COED 11<sup>th</sup>), *Dictionary.com Unabridged: Random House, Inc.* (D.com), *Dictionary.com's 21st Century Lexicon* (D.com 21L), *Dictionary of American Regional English* (DARE), *Merriam Webster's 11th Collegiate Dictionary* (MW's 11<sup>th</sup> CD), *Merriam Webster's Unabridged Dictionary* (MW'sUD), *Oxford English Dictionary, 2<sup>nd</sup> edition*, version 4.0 (OED4) and *Random House Webster's Unabridged Dictionary* (RHUD). In addition, some more recent words have been found in *The Longman Register of New Words* (Ayto, 1990), and in monographs of contemporary authors (see Chapter 3). For those which were not precisely dated and fully described in the literature, the above dictionaries were consulted in order to provide comprehensive information.

The methodological point of departure for the analysis and presentation of the results is Pennanen's typology, based on the distinction of the productive types according to the part of speech of the source and the resulting word. His typology consists of six types<sup>15</sup>, of which some are extremely productive at present (especially Type II, verbs formed from action nouns), while others are very small and seem to be disappearing (especially Pennanen's Type V, adjectives from nouns).

The author does not include in his sample two other types of words which are commonly described as BFs in the literature: prefix BFs (e.g. *dentulous* < *edentulous*, *ept* < *inept*) and inflectional BFs (e.g. *bicep* < *biceps*, *kudo* < *kudos*). He includes the former in the area of mere shortening and he does not consider the latter as real BFs because only one element of the internal word-form (number) is changed. In the present work, these processes, however, are described and analyzed together with those "traditional" Pennanen's six types, being incorporated in the system as Type VIII and Type IX, namely for the following reasons: As far as prefix BFs are concerned, not only form, but also the meaning of the resulting unit is changed, even if partially. This means that semantically, the change is usually limited to the

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<sup>15</sup> For the detailed description of all the types see Chapter 4

relation of hyponymy or antonymy as in, e.g., *enclitic* / *proclitic* > *clitic* “(of a word) functioning as a bound form; closely connected in pronunciation with a preceding (*enclitic*) or following (*proclitic*) word and not having an independent accent or phonological status” (hyponymy); *edentulous* “toothless” > *dentulous* “having teeth” (antonymy).

Inflectional BFs are included in the new classification, since they are seen as the results of a similar analogy as the “traditional” BFs: The form of a word is supposed to be plural and a new (even if only grammatical) item of vocabulary is formed – the singular form which did not exist (e.g. *kudo* < *kudos*) or was not used (e.g. *bicep* < *biceps*).

In the sample from the second half of the 20<sup>th</sup> century, several items have been found which seem not to belong to any of the categories established by Pennanen. Although this category is very little (3 items), the words are characterized by certain common, typical features, the existence of which supports the idea of considering them as another type of BF, which could continue developing in the future. Since this category deserves attention, I have integrated this group of BFs in my system as type VII.

For the purpose of more logical order of types according to parts of speech in the present study, the original Pennanen’s typology has been slightly modified in that his Types V and VI have been interchanged (cf. Chapter 4). The newly collected sample of the 20<sup>th</sup> century BFs thus includes the following nine types:

- Type I: verb from agent / instrument noun
- Type II: verb from action noun
- Type III: verb from adjective
- Type IV: noun from adjective
- Type V: noun from another noun which is believed to be its derivative
- Type VI: adjective from abstract noun
- Type VII: adjective from agent noun
- Type VIII: prefix back-formations
- Type IX: inflectional back-formations

The method of collecting of the relevant words consisted in the extraction from the dictionaries of all words whose entries contained the expression “back-formation”, either in etymology, or in the definitions and further comments. Another step was the elimination of those BFs which occurred before 1900. The date of the first occurrence was presented differently in different dictionaries; sometimes it was directly attached to the etymology information, in other cases the date had to be traced up in the quotations. An important phase of the selection was the study of semantic relations between the source word and the back-formed

item; different meanings of polysemous words had to be carefully matched with the source words so that they could be correctly classified in the respective type and time period. There occurred items with which only one of the meanings was the result of BF while other meanings were not, e.g. *quantitate*: MW's 11<sup>th</sup> CD (1927) "to measure or estimate the quantity of; especially to measure or determine precisely; to express in quantitative terms", BF; however OED4 (1960), *medicine*: "to ascertain the quantity or extent of", derivation. Other polysemous words produced BFs of individual meanings in different time periods (e.g. *escalate*<sup>1</sup>, 1922; *escalate*<sup>2</sup>, 1944, see Appendix II, Type I). Unclear examples taken from the literature were verified in the dictionaries and added to the material. After all the relevant items had been gathered, they were evaluated in terms of the typology, described and the samples were analyzed.

In the present study, each BF is described in terms of the following categories: name of the source dictionary; year of the first record; grammatical characteristics (part of speech, type of verb from the point of view of its transitivity, number of noun, etc.), the source word; meaning of the resulting word (plus stylistic or/and regional connotation, if relevant). Some entries do not explicitly express the fact if the verb is transitive or intransitive, in such cases, only the category of verb ("v.") is presented. With some, the definition of meaning of the source word is also included as it supports the logical semantic link between the members of the pair. In some cases, more dictionaries are quoted because each of them gives only part of the necessary information, or they differ in the interpretation of the data. All the gathered items together with their detailed descriptions are listed in the appendices. The following is an example of such a description of an item:

### **cliff-hang**

MW's 11<sup>th</sup> CD: **1946**, intr. v. f. *cliff-hanger* n., informal; to await the outcome of a suspenseful situation; OED4: *cliff-hanger*: any story, play, etc., in which suspense is a main concern; Americanism

The analysis also follows a certain scheme: in each type the gradual development in quantity over the given period is indicated. Then the items of the type are classified from several points of view: according to the meaning of the source word (and the meaning of the resulting word where appropriate, because of diversity of meanings); according to the complexity of BFs (here four subcategories are distinguished: compounds of full words, neoclassical compounds containing combining forms, simplex derivatives and monomorphemic words). Then the suffixes (or prefixes in Type VIII) subtracted from the source words are evaluated from the point of view of their frequency in the given sample. The gathered items are furthermore

described according to their stylistic and regional connotation (including subcategories ‘neutral’, ‘regionally coloured’, ‘colloquial’, ‘slang’ and ‘technical term / learned word’). The regional connotation is indicated in various dictionaries in a different manner, which has been left unchanged in my survey (e.g. Americanism, N. American, U.S., etc.). The lists of the stylistic values for each type are provided in clear tables in appendices. Finally, specific features of the given sample are highlighted, pointing to some interesting, surprising or unusual properties and circumstances which deserve attention.

The following chapter presents a detailed description and analysis of the newly gathered sample of BFs from the first half of the 20<sup>th</sup> century. This sample is intended to complete Pennanen’s sample analyzed in his study (1966).

The results of both analyses, Pennanen’s and that of the present work, are then integrated and the final comprehensive picture of the situation in terms of the process of BF in the period of 1900-1960 is provided.

## 7 BACK-FORMATION IN THE FIRST HALF OF THE 20<sup>TH</sup> CENTURY

### 7.1 Description and analysis of BF not included in Pennanen's study (new sample)

The analysis is based on the sample of 246 items distributed in eight categories referred to as Types I - IX. No item has been found for Type VII in the first half of the 20<sup>th</sup> century. A detailed list of all the words including their meanings and other relevant information is given in Appendix II.

#### 7.1.1 TYPE I: verb from agent / instrument noun

*bartend* < *bartender* / *doze* < *dozer*

During the first half of the 20<sup>th</sup> century, the considerably strong Type I has a rising trend, with the most fruitful period being the 1950s. As far as the meaning of the source words is concerned, names of persons (e.g. *co-driver*) slightly prevail over the items referring to inanimate entities (e.g. *zipper*). The higher number of simplex items is slightly surprising as the expectation before the analysis presupposed a much higher number of compounds. The category of "simplicia" (the items which have only one root) includes words of two kinds: monomorphemic words and derivatives. Some derivatives contain a free base and an affix, e.g. *overachieve*, others consist of an affix and a bound base, e.g. *transduce*. Examples of monomorphemic items are *bus*, *squeg* or *zip*.

Suffix *-er* confirms here its status of the most typical agent suffix subtracted; its close variant, *-or* (as in, e.g., *curator*), is not very numerous. There are two different suffixes: *-ent*, *-ive* (*adolescent*, *sedative*) The pair *bus* < *busboy* differs from the other BF pairs in that the subtracted element bearing the function of the agent noun morpheme is not a suffix but a free noun: *-boy*.

This analysis has shown an interesting result. In contrast to the same category in Pennanen's sample for the same time period, here almost a half of the items (fifteen) are evaluated as Americanisms, at least by their origin, e.g. *bartend*, *cliff-hang*, or *free-load*. The answer to the question why it is so can be probably the fact that Pennanen concentrated mainly on the British or regionally neutral material. The number of neutral items is also considerable – fifteen out of thirty-four. Examples are: *bird-watch*, *copyedit*, and *zip*. There are a few slang words (e.g. *knuckle-dust*), but such a number (five out of thirty-four) is not very significant.

With some of the items, not only an agent noun is presented as the source word, but also an action noun as a possible source variant. In these cases we cannot decide for a certainty which of

the nouns is the real source word. Examples of such verbs are: *adolese* < *adolescent* / *adolescence*, *redbait* < *redbaiter* / *redbaiting* and *spelunk* < *spelunker* / *spelunking*.

In pairs “verb < agent noun”, from the semantic point of view, the most expected definition of the verb “to act as a /...agent noun.../” is the rule here. There are only some very slight semantic differences, e.g.: *adolese* – “to be an adolescent” (state), *sidewind* – “to move like a sidewinder” (simile). The pairs of “verb < instrument” type are semantically rather more diverse. *Cliff-hanger* refers to a suspenseful story; the related meaning of the derived verb (*cliff-hang*) is not “to do sth. by means of /...instrument.../”, but “to be exposed to a suspenseful situation”. *Escalate* has several meanings, which have different dates of the first occurrence: the oldest one (1922) can be considered as the basic – “to climb or reach by means of an escalator”; later other meanings, metaphorical, occurred: “to increase in extent, volume, number, amount, intensity, or scope” (1944) and “to increase or develop by successive stages” (1959). The last one is also used in a more specialized area: “to develop from ‘conventional’ warfare into nuclear warfare”. *Skyscraper* refers to a result of the action (*skyscrape* = “to built a skyscraper”) rather than to an instrument. *Sedative* has an exceptional form: the suffix *-ive* is not typically an “instrument” suffix, but the word can be considered as referring to an instrument to make somebody calmer, so the resulting verb *sedate* “to dose with sedative” can normally be included in this category. *Transduce* is presented in OED4 with two meanings, one being more general, the other, occurring slightly later, a technical term in electronics.

*Overachieve* and *underachieve* are interesting items in that they are antonymous terms in psychology, both recorded in the 1950s.

*Micronize*, *rotavate* and *varitype* are verbs formed by BF from proprietary names of various devices and demonstrate clearly the typical scheme of this category: “to do something by means of /...an instrument.../”.

### 7.1.2 TYPE II: verb from action noun

#### *acculturate* < *acculturation*

Generally it is possible to say that, within the whole period, type II is growing in number. An overwhelming majority of the source words clearly refer to an action or process, by which something is done (e.g. *defibrillation*). In three cases, the source noun may be understood as referring to a sort of result, product or state to which the action in the verb leads rather than to an action: *choreography* (> *choreograph*, v.) may be defined as “the composition and arrangement of dance movements and patterns (as for a ballet) created usually to accompany a particular piece of music or to develop a theme or a pantomime; also: a composition created by this art” (a

product of art). *Symbiosis* (> *symbiose*, v.) refers to “a state of association of two mutually supportive organisms; living together”. *Thrombosis* (> *thrombose*, v.) is used to denote “a local coagulation of the blood in any part of the vascular system during life, the formation of a thrombus” (resulting state).

Most of the words are morphologically complex; examples of the prefixed or suffixed ones are *appersonate*, *dedifferentiate* or *intercool*. There are only seven monomorphemic words, e.g. *brute*, *pend* and *sorb*. The compounds are marked by various degrees of tightness of the two components, as a result of the same relation in the source noun. Verbs like *Indian-wrestle* or *loud-hail* are much more transparent as compounds and looser in the mutual relation of the parts than, e.g., *carboxylate*, *chemisorb*, or *chromatograph*, the latter ones mostly containing a bound morpheme, a combining form, as their first component.

The most frequent suffix expressing the meaning of an action in this category is *-ion/-ation* (as in, e.g., *abreaction*, *acculturation*). Source nouns with this suffix form 67.5% of the material. The suffix *-ing* (*blockbusting*, *bruting*), which is generally also fairly frequent especially because of verbal nouns referring to an action, represents, however, not a very high proportion in this particular sample. Suffix *-is* (*phagocytosis*, *pinocytosis*) typically occurs in connection with the learned connotation. A few examples of words ending in *-y* have, with the exception of *subassembly*, an identical structure (*choreography*, *chromatography*, *planography*), and semantically are also rather specialized. The remaining three various suffixes (in: *ecphoria*, *fellatio* and *surveillance*) are all marked by foreign connotation (Latin / French).

The sample is marked by an extremely high number of technical terms and learned words, which form 52 %. Most of them come from natural sciences, especially chemistry, e.g. *derivatize*, *metalate*. There are not many regionally coloured words, no slang words and almost no colloquial words. The words labelled here as “unmarked” represent 39 %; most of them, however, tend to be used in a slightly learned or formal context rather than in a neutral context. These are not labelled in dictionaries as stylistically marked or classified within a specific scientific area, but they would not be probably used in the common everyday conversation. At least they may be felt as formal variants of slang or colloquial words, used to manifest the speaker’s higher education (e.g. *fragmentate*), or to function as euphemisms for taboo words (e.g. *fellate*). With a few exceptions (e.g. *keeper*, *upkeep*), they are of Latin, Greek or French origin. Words like *intercool*, *interconvert*, *reflate* and similar are not explicitly indicated as learned in the dictionaries, however, according to their occurrence in texts of learned character quoted under the entries, it is clear that they are used mainly in terms of various branches of science and technology.

From the semantic point of view, the expected relation between the source and resulting word – “to do sth. by /...action noun.../” - was the most often occurring one, e.g. *abreact*: “to remove by abreaction”, *acculturate*: “to change through acculturation”, *appersonate*: “to subject to appersonation”, *auto-suggest*: “to produce, remove, or influence by auto-suggestion”, etc. This type of definition semantically clearly illustrates the direction of BF – from the morphologically more complex noun towards the verb.

Other verbs are defined by means of a so-called true definition, which explains the meaning of the verb directly, using words of a different root than that in the source noun, e.g. *brute*: “to shape (a diamond) by rubbing or grinding with another diamond or a diamond chip”; *co-vary*: “to change together with something else so as to preserve certain interrelations unchanged”.

### 7.1.3 TYPE III: verb from adjective

#### *fetishize < fetishized*

The number of items over the period has slightly grown, with the peak in the thirties.

The highest occurrence of adjectives referring to the result (e.g. *french fried*) was expected, since semantically, “result” is often implied in the past-participial form and the resulting verb is a logical output. On the other hand, there are only two items relating to an action (*gangling*, *decongestant*). Generally said, meaning of the adjectives is very closely tied to their form, or to be more precise, to a particular suffix (*-ed* typically used for the result, *-y* for the quality).

The fact that there is only one compound verb (*french fry*) in this type is fairly surprising. However, in comparison with the other types, there are much more monomorphemic items; they form 50 % of all words in this category, e.g. *floss*, *rort*, *scrag*.

This category is marked by a higher number of slang words (e.g. *gangle*, *scrag*) and technical terms (e.g. *decongest*, *nodulate*). This probably results from the evaluating or descriptive character of most source adjectives involved. There are also a considerable number of neutral verbs (e.g. *fetishize*, *stupend*). The verb *bonderize* is not labelled as a learned or technical term, but the quotations only introduce texts of engineering.

The source adjective *flossy* has a fairly high number of meanings; the derived verb is based on that one which is figurative: “saucy, impertinent, fresh, fancy, showy” > “to flirt, to show off”. The verb *nodulate* is presented in OED4 in two different meanings with two different dates of first usage: 1939, transitive verb: “to produce root nodules on”, and 1956, intransitive verb, of a plant: “to undergo nodulation”. Similarly, the verb *quantitate* from 1957 is explained as “to measure or estimate the quantity of, especially to measure or determine precisely; to express in quantitative terms”, while the same verb from 1960 is labelled as a technical term in medicine,

“to ascertain the quantity or extent of”. The latter, however, is not a BF, but the result of derivation from *quantity* (n.). *Stupend* is introduced in OED4 as G.B. Shaw’s word.

#### 7.1.4 TYPE IV: noun from adjective

##### *narcolept < narcoleptic*

The group is one of the richest. It is fairly stable in number during the period, being the most productive in the thirties, similarly as Types II and III. There are at least five identifiable classes of meaning of the source adjectives. The most numerous are those which refer to a feature / quality. Typical examples are: *biconical*, *dilly*, *frivolous* and *prissy* – mostly slang evaluative adjectives. The number of those adjectives which are to a certain extent classifying is also fairly high, e.g. *archosaurian*, *cryptozoic*, *osmophoric* and *Rhæto-Romance*. At the same time, they are very often technical terms, which is in agreement with their classifying nature. There is also a considerable number of adjectives relating to a habit or state, e.g. *dichromatic* (“affected with dichromatism”), *didactic* (“overclined to instruct others”) and *narcoleptic* (“suffering from narcolepsy”). The remaining two classes are not very rich in the number of items: relating to a previous action, e.g. *polyunsaturated*, and relating to a place / position, e.g. *interfluvial*.

The prevailing class in the group of back-formed nouns of Type IV is the class of names of things / abstract entities, e.g. *bicone*, *ferromagnet* or *intersex*. The other classes are not so rich, with persons being the most frequent meaning: *narcolept*, *priss*, *slant-eye*. Examples of animals / organisms are *archosaur* and *cryptozoa*, places: *bizone* and *exurb* and processes: *eustasy* and *smarm*. The only noun referring to a plant in the group is *apomict*.

The type is marked by a high number of compounds, especially those containing a combining form, e.g. *crystallo-*, *crypto-*, *ferro-*, *homæo*, *mero-*, *meso-* *osmo-*, etc. Among the other words, monomorphemic items form almost 50 %; these are, e.g., *dill*, *dip*, *funk*, *sleaze* and *smarm*, being usually slang or colloquial.

The most frequent suffix of the source word is *-ic*, as in, e.g. *didactic*, *spasmogenic* and *syntonic*. Suffix *-y* is much less frequent, examples are *prissy*, *sleazy*, *wacky*. Suffix *-al* has several variants, e.g. in *bizonal*, *biconical*, *interfluvial* and *intersexual*, their common feature being the co-occurrence of a prefix. The rest is a mixture of various suffixes having just one or two representatives, e.g. *frivolous*, *exurban*, *orbicular*, *slant-eyed*, *Rhæto-Romance* or *trivialis*.

The nouns back-formed from adjectives are typically technical terms of various fields, especially natural sciences. Such coloured words represent 59 % of the whole group. Examples are: *lysogen* (microbiology), *parafovea* (anatomy), or *trichromat* (ophthalmology). Other stylistic classes are not surprising – traditionally low number of colloquial words (e.g. *frivol*)

and not very high number of the neutral ones (e.g. *sardony*, *trivia*). In addition, many of the “neutral” words still tend to appear in a formal rather than neutral context (e.g. *trivia*, *interfluve*, *homæostat*). Out of the seven slang words, five are at the same time regionally marked, three of them being Australian (e.g. *lair*). There are four originally American words (e.g. *slant-eye*).

Some of the words are in the quotations of their first appearance presented in inverted commas, since at that time, such a word seemed to be unusual, surprising, or understood as a new term which deserved explanation. Later texts show that the words started to be accepted as a norm and used without any special indication. This does not only apply to this type; it is a general feature occurring with other types of BFs as well. In this particular type, an example is the noun *biface*: 1934 - “Throughout all Africa a core-tool, or ‘biface’, is the oldest known technique, and the same applies to India”; 1946 - “The bifaces are mostly made of flakes” (OED4).

The prevailing meaning of the resulting nouns is “thing / abstract entity” (26 out of 56 words). Meaning “person” occurs in thirteen items. However, there are a few nouns referring to both abstract entities (e.g. behaviour) and persons, e.g. *frivol* (behaviour and person), *Rhæto-Romance* (language and speaker), *sleaze* (quality and person).

In his identification of the main features of BF, Pennanen introduces an idea that the back-formed unit need not be necessarily shorter than the source one. This situation is not very common, but there occur such cases occasionally: an example of such an item is *polychromasia* (< *polychromatic*) within this type.

*Slant-eye*, is an exocentric (bahuvrīhi) compound referring to “a person with slanting eyes, specifically an Asian”, usually taken to be offensive and having the U.S. slang connotation.

### **7.1.5 TYPE V: noun from another noun which is believed to be its derivative**

#### ***agoraphobe* < *agoraphobia***

The most fruitful period within this category is the fifties, after a certain decrease in the previous twenty years. The meaning “state of mind / disease” seems to be the typical basis of BF within this type, represented by a relatively unified structure, e.g.: *agoraphobia*, *mythomania* or *schizophrenia*. Also various kinds of human activity or kinds of processes are fairly numerous here, represented by the same number of items, e.g. *cryoscopy*, *polymerization* or *radiochemistry*. *Scintiscanner* is a special case in that it is a concrete noun referring to an instrument. Similarly *strip-teaser*, an agent noun, is not a usual departure point in this category. Meaning “person” is the most frequent resulting meaning, being represented especially by “a sufferer from a sort of disease”, e.g. *agoraphobe* or *schizophrene*. Other nouns referring to a

person usually refer to someone who does the activity denoted by the source noun, e.g. *aerobat* or *grievant*. As the majority of words involved in this category are technical terms or learned words, the meaning “thing /abstract entity” usually refers to a substance or element within a defined class, e.g. *plasmal* or *taxon*. There are also several nouns referring to a result of a previous activity, e.g. *polymerizate* or *vulcanizate*. *Scintiscan* is a result of an activity too, but the source word does not refer to the activity but to the instrument used in it. *Strip-tease* is exceptional in that the source agent noun (*strip-teaser*) does not yield a verb but an action noun.

There are very few full-word compounds, e.g. *leg-pull* or *strip-tease*. On the other hand, there are a fairly high number of neoclassical compounds, e.g. *mythomane*, *protanope* or *pseudoallele*. Out of the rest, apart derivatives, four words are monomorphemic: *bloop*, *kine*, *morph* and *taxon*.

This category is marked by a high diversity of the suffixes subtracted. The most frequent suffix is *-ia*, usually removed from a noun referring to a disease resulting in the name of a person suffering from it (e.g. *claustrophobia* > *claustrophobe*). The suffix *-er* represents various meanings: an action (*blooper*), an instrument (*scintiscanner*) and an agent (*strip-teaser*).

The group contains a large proportion of words belonging to the terminology of a science, study or profession (*plasmal*, biochemistry; *morph*, linguistics / biology; *schizophrene*, psychology). Among the words which are here labelled as unmarked, however, there are many which are not presented in dictionaries explicitly as technical terms or learned words, but many of them would probably never appear outside the context of the respective branch, e.g. *cryoscope* (chemistry / medicine) or *vulcanizate* (engineering). Some others, especially those referring to phobias or other special states of mind are not classified as terms either, although they could seem to be, e.g. *agoraphobe*, *claustrophobe* or *retardate*. At least they are formal, occurring in learned contexts. *Strip-tease* is the only Americanism by its origin and at the same time the only colloquial item here. Probably the most “neutral” is the noun *leg-pull*.

The noun *claustrophobe* is presented in OED4 as recorded for the first time in 1911; interesting is the fact that this headword was included in the dictionary much later than Pennannen’s monograph was written (1966) – as late as 1997. The origin of *vulcanizate* is interpreted differently in various dictionaries: MW’s 11thCD describes it as a BF from vulcanization (n.), while OED4 suggests derivation from *vulcanize* (v.).

Again, there are some items which occur in quotation marks in the texts of their first occurrence in OED4, which indicates the feeling of certain oddness, e.g. *taxon*: “Such conceptions as the ‘species’, or ‘taxon’ in taxonomy (1929 Scientific Monthly Feb. 107/2).” Later texts show a full acceptance: “Taxon ...was, however, a very convenient word, and after

two years [sc. by 1950] 60% to 70% of botanists were using it (1953 Proc. 7th Internat. Bot. Congr. 1950 465/1)”; “There is no fixed typological criterion of an extinct species, genus, family, or other taxon (1971 J. Z. Young Introd. Study Man xxviii. 400).”

*Taxon* is, in addition, a special case of BF where the morpheme boundary in the source word is not the same as that on which the subtraction took place: *taxo-* / *-nomy* (from Greek: “arrangement” / “distribute”) vs. *taxon* / *-omy*.

### 7.1.6 TYPE VI: adjective from abstract noun

#### *aerobic* < *aerobatics*

The distribution of BFs of this type over the period is fairly well-balanced, slightly growing; for each decade two to four items have been found. The resulting adjectives in this group are related to four types of noun-meanings, of which the meaning “activity / process”, (eight items out of seventeen) is the most frequent. Examples of such nouns are: *aerobatics*, *autoimmunization* and *logistics*. Only one adjective is related in meaning to a person, in this particular case, actually, to people: *paratroop* < *paratroops*.

There are eight compounds, most of them being neoclassical, e.g. *autoimmune*, *biometric* or *dermatoglyphic*. On the other hand, there is only one monomorphemic word (*cloze*); the rest are words containing various affixes, e.g. *co-ordinate*, *cybernetic* or *superconductive*. It seems that the suffix *-s* is a typical ending of the source nouns of this class – it forms almost a half of the material.

This group is special because of the fact that there are no regionally coloured words and in addition, there are no colloquial or slang words either. This type tends to be technically or scientifically oriented. Even the group of “unmarked” words is not unambiguous (e.g. *dermatoglyphic*, *surreal*). A considerable number of adjectives are derived from the name of a particular specific field (e.g. *avionics*, *biometrics*, *logistics*, etc.) and their definition is fairly stereotyped: “of or relating to .....” where the end of the definition is the name of a respective science / profession / study, etc.: *avionic* “of, for, or relating to the field of avionics”; *biometric* “of, relating to, or concerned with biometrics”; *logistic* “of or pertaining to logistics”. Should they be considered as technical terms? They probably should – if we decide that the name of a science itself is a technical term. As a result, this fairly small class is at the same time limited in style – tending to be mostly marked as technical terminology.

The adjective *cloze* is not commented on in the same way in different dictionaries – some of them say that it is the result of shortening; some prefer the process of back-formation.

The origin of *paratroop* is also debatable. MW's UD suggests that the source word is *paratroops*, which is a plural concrete noun. This, however, differs from what is expected here from the point of view of Pennanen's classification: the usual source word in this type is an abstract noun, as in, e.g. *surreal* < *surrealism*, or *superconductive* < *superconductivity*. Random House Dictionary, on the other hand, describes this adjective as a BF from *paratrooper*, an agent noun. Then, we would have here a new category, which is not included in Pennanen's typology: adjective from agent noun. This category is not likely to be very rich in the number of items, but there might be some more words found in the second half of the twentieth century's material. The question if such a type can exist will have to wait for the answer until the rest of the material collected is analyzed and described.

### 7.1.7 TYPE VII: adjective from agent noun

No such items have been revealed for the first half of the 20<sup>th</sup> century. This type is presented for the second period as a new category; in addition, one item also appears among the newest neologisms (*cruciverbal* < *cruciverbalist*, see Chapter 10.3.7).

### 7.1.8 TYPE VIII: prefix BFs

#### *gruntle* < *disgruntle*

The only decade for which no item was found is 1911-20, being followed by a richer period, the 1920s, with the highest number (three).

The sense relations between the source and resulting words are distributed almost equally; the fairly high number of hyponymic pairs (e.g. *sorb* < *absorb* /*adsorb*) is a little surprising, since it is antonymy that was expected to be the prevailing relation (*dentulous* < *edentulous*). Meronymy is represented by *opsin* defined as "a protein liberated from *rhodopsin* by the action of light" (OED4).

This class, unlike those where a suffix is involved, contains various parts of speech: nouns are typically prevailing (*clitic*, *lapsarian*, *opsin*, *sorption*), but there are also adjectives and verbs. The group contains no compound words, and of the rest, three are monomorphemic: *ept*, *gruntle* and *sorb*. The class is a collection of words with various prefixes, of which only two are identical, whereas this identity results from the membership of an identical word family (*absorb* & *adsorb* and *absorption* & *adsorption*). The prefixes are in agreement with the semantic relations of the pairs, i.e. those expressing antonymy (e.g. *in-*, *dis-*), those distinguishing cohyponyms (e.g. *ad-/ab-*, *en-/pro-*) and one referring to a holonym (*rhodo-* in *rhodopsin*).

Five items out of eight are technical terms: *clitic*, *lapsarian*, *opsin*, *sorb* and *sorption*. The rest seem to be unmarked, however, the words are not very frequent and *edentulous* / *dentulous*, e.g., are foreign (formal) variants of neutral *toothless* / *having teeth*.

### 7.1.9 TYPE IX: inflectional BFs

#### *bicep* < *biceps*

This category is generally very small; altogether there are only four items found for the first half of the 20<sup>th</sup> century (*bicep*, *gladiola*, *kudo*, *sciapod*), having no representatives in the first decade and in the forties and fifties.

None of the resulting words is a full-word compound, historically, *sciapod* comes from Greek words meaning “shadow” and “foot”, *gladiola* is historically a suffixed diminutive; however synchronically, all of them are monomorphemic. All the items are nouns. In *biceps* and *Sciapodes*, the suffix expresses the actual plural, while in *gladiolus* and *kudos*, the ending is erroneously taken as the plural, based on the similarity with regular forms. *Gladiolus* comes from Latin diminutive of “gladius - sword”, and *kudos* comes from Greek, meaning “praise”. Nouns *clitic* and *lapsarian* may function as adjectives as well, so the distribution is fairly balanced. Since the main linguistic change here is that in grammatical category (plural vs. singular), the part of speech as well as the lexical meaning of the words remain intact.

Although *bicep* and *gladiola* are not labelled in dictionaries as terms, they could be understood as terms belonging to biology and botany, respectively. *Sciapod* has a special status because of its historical and artistic determination, being defined as “a monster of medieval iconography.”

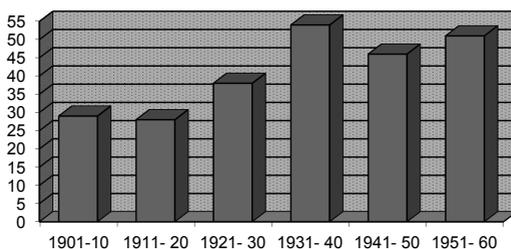
### 7.2 Summarizing analysis of the period of 1901-1960 – words collected in the present research (new sample)

For the first half of the 20<sup>th</sup> century (1901 – 1960), the total number of back-formed words found within my research is 246. These, however, have been collected as an additional material to that of Pennanen’s, who introduced, described and analyzed 225 items for the given time period in his monograph. The intention of this part of our research was to gather and investigate those items which Pennanen did not include in his analysis, and complete thus the overall picture of the process of BF for the first half of the 20<sup>th</sup> century.

There have been found many more back-formed words than it was originally expected. In our new sample, the richest decade is the thirties, and the level of numbers of newly introduced BFs in the following twenty years does not decrease significantly.

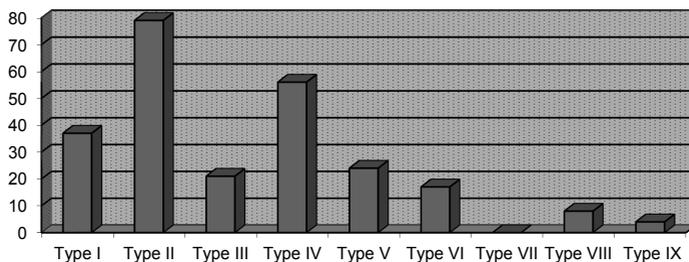
	1901 – 1910	1911 – 1920	1921 – 1930	1931 – 1940	1941 – 1950	1951 – 1960	Total
Type I	5	0	2	8	9	13	<b>37</b>
Type II	8	13	12	16	16	14	<b>79</b>
Type III	1	1	4	9	2	4	<b>21</b>
Type IV	8	7	7	14	12	8	<b>56</b>
Type V	3	3	5	3	3	7	<b>24</b>
Type VI	2	3	3	2	3	4	<b>17</b>
Type VII	0	0	0	0	0	0	<b>0</b>
Type VIII	2	0	3	1	1	1	<b>8</b>
Type IX	0	1	2	1	0	0	<b>4</b>
Total	<b>29</b>	<b>28</b>	<b>38</b>	<b>54</b>	<b>46</b>	<b>51</b>	<b>246</b>

Table 4: Number of items in individual decades and the total number of all items in the period of 1901-1960 (new sample)



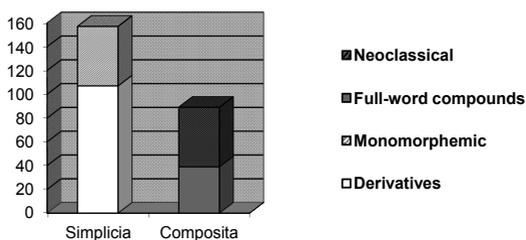
Graph 1: Development of the process of BF over the period of 1901-1960 (new sample)

As far as the representation of individual types is concerned, Type II (verb from action noun) markedly prevails over the other types, being followed in number by Type IV (noun from adjective). The three last types in our classification, Type VII (adjective from agent noun), Type VIII (prefix BFs) and Type IX (inflectional BFs) are not included in Pennanen's classification at all, so their numbers will not increase after the integration of both samples.



Graph 2: Representation of individual types over the whole period of 1901-1960 (new sample)

Except for Type I, derivatives prevail in all the groups, which is reflected in the overall survey – the share of these complex words highly outnumbers all the other structures. Among the compounds, those containing combining forms (neoclassical) slightly prevail. There are also a considerable number of morphologically simple words. In the relation of *composita* and *simplicia*, *simplicia* form majority (64 %).

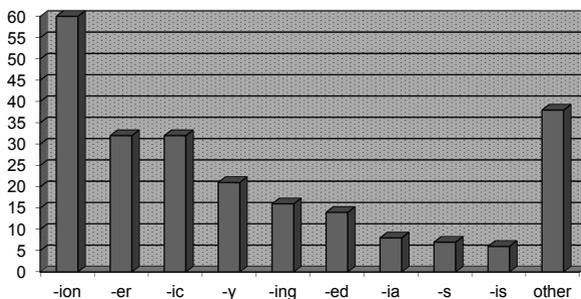


Graph 3: Shares of individual morphological structures over the whole period of 1901-1960 (new sample)

The most frequent suffix subtracted in the new material of the first half of the 20<sup>th</sup> century is *-ion / -ation*; it appears mainly in the source nouns of Type II, referring to action, but it also, though marginally, occurs in nouns of Types V and VI. The occurrence of suffixes *-er* and *-ic* is not insignificant either. Suffix *-er* appears especially in Type I (agent / instrument nouns) and in a small number in Type V; the domain of *-ic* is Type IV (adjectives). Suffix *-y* is typical of nouns of Type IV, it partly occurs in Types II (action nouns) and III (qualitative adjectives). Suffixes *-ing* and *-ed* are involved in the process almost equally, the former occurring in Type II (action nouns), the latter mainly in adjectives of Type III and marginally of Type IV. Suffixes -

*is*, *-s* and *-ia* appear in a lower number of source nouns, they are typically subtracted from nouns in Type II (*-is*, *-ia*) and Type V (*-s*).

The rest is a variety of miscellaneous suffixes occurring in different types with a frequency from one to six items: *-al*, *-an*, *-ance*, *-ant*, *-ar*, *-boy*, *-ce*, *-eme*, *-ent*, *-ian*, *-ics*, *-io*, *-ism*, *-ity*, *-ive*, *-ogen*, *-or*, *-ous* and *-ure*.



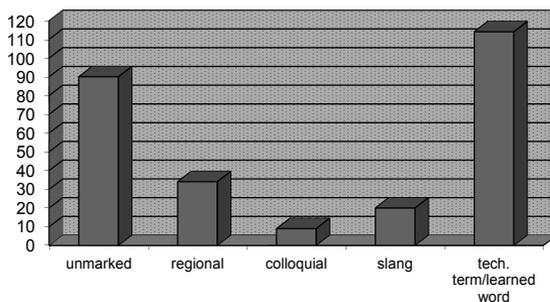
Graph 4: Representation of individual suffixes subtracted over the whole period of 1901-1960 (new sample)

The technical terms or learned words represent the highest number of back-formed items in the given period (46%). Such a result, essentially, was expected: the reason why there are so many scientifically tinged words presumably consists in the fact that this sample forms a supplement to Pennanen’s collection which is supposed to be composed of central, most common and most generally used BFs.

On the other hand, there is a fairly high share of words which are not marked in the dictionaries as stylistically coloured or specially classified from the stylistic point of view (37%). This group, however, contains a considerable number of items which are very close to the learned vocabulary and are often limited in use to a specific sphere of human activity, although not labelled as technical terms or learned words explicitly.

The regional connotation is predominantly American; there are a few items of Australian, Canadian or British origin or usage.

Colloquial and slang connotation is not a very frequent element of meaning here – probably because of the longer existence of the words collected (from a hundred to fifty years ago) and their more stable position in the lexicon. Some more back-formed items of colloquial or slang stylistic value which probably existed during the period investigated now may have disappeared from the use or proceeded to the standard, unmarked sphere of the lexicon.



Graph 5: Portions of unmarked and stylistically and regionally coloured words in the material over the whole period of 1901-1960 (new sample)

### 7.3 The overall picture of the first half of the 20<sup>th</sup> century as a result of both Pennanen's and the present research

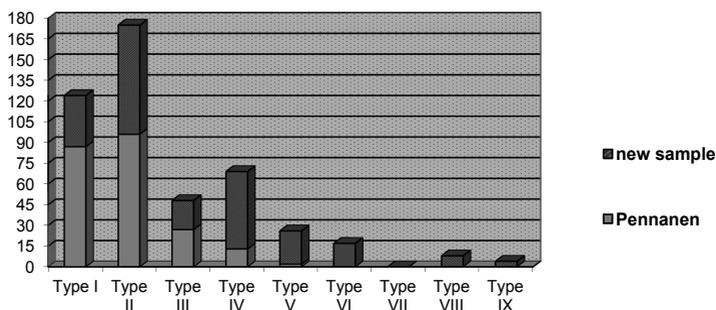
One of Pennanen's most important ideas is the conclusion that during the 19<sup>th</sup> and the 20<sup>th</sup> century, BF had become an important process of word-formation. The sudden increase in the number of BFs was a reaction of the language to the enormous development in all fields of human activity (Pennanen, 1966, p. 91). This conclusion has also been confirmed in the analysis of the new sample: in addition to Pennanen's 225 back-formed words, I have found, described and analysed another 246 for the period of 1901-1960, the last stage of his investigation. As a result, 471 BFs have been found for the given period, which is an enormous quantity in comparison with any of the previous ones.

In this connection, it is necessary to call attention to the fact that there is a certain difference between Pennanen's and our approach to the question of what should be involved in the analysis. As far as the 20<sup>th</sup> century is concerned, Pennanen essentially deals only with the first four categories, having found a prevailing number of items of Types I-III (93 %) and only thirteen items (6 %) for Type IV. The other two types are, in Pennanen's opinion, sporadic and marginal word-formation processes: he has only two items of type V (nouns from nouns) and no item of Type VI (adjectives from abstract nouns) for the 20<sup>th</sup> century in his material. Our research of the additional material from the first half of the 20<sup>th</sup> century, on the other hand, has included all the six types described above, and in addition, another two categories – prefix and

inflectional back-formations, referred to as Type VIII and Type IX. Category VII remains empty for the first period. It is useful to compare the results of Pennanen's and the present analysis:

	Pennanen		Additional sample of the present research		Total	
Type I	87	38 %	37	15 %	124	26 %
Type II	96	43 %	79	32 %	175	37 %
Type III	27	12 %	21	8 %	48	10 %
Type IV	13	6 %	56	23 %	69	15 %
Type V	2	1 %	24	10 %	26	5 %
Type VI	0		17	7 %	17	4 %
Type VII	0		0		0	
Type VIII	0		8	3 %	8	2 %
Type IX	0		4	2 %	4	1 %
<b>Total</b>	<b>225</b>		<b>246</b>		<b>471</b>	

Table 5: The numeral / percentage representation of individual types in Pennanen's and in the new sample, and their addition, regarding the period of 1901-1960



Graph 6: Representation of individual types in Pennanen's and the new sample, regarding the period of 1901-1960

One of the biggest differences, apparent at first sight, is a fairly high share of Type IV in my own analysis (23 % against Pennanen's 6 %). Therefore, it belongs to the three most numerous categories and remains such even after the addition of both analyses. Another relevant difference is in the relation of Type I and Type II: a fairly high number of items of Type II have been added to Pennanen's result (where these two types were almost equal), which has significantly increased the final distance between them. In contrast to Pennanen's work, there have been identified a decent number of items of Type V and some items of Type VI in the present research, although these two categories still remain the smallest, even after the addition.

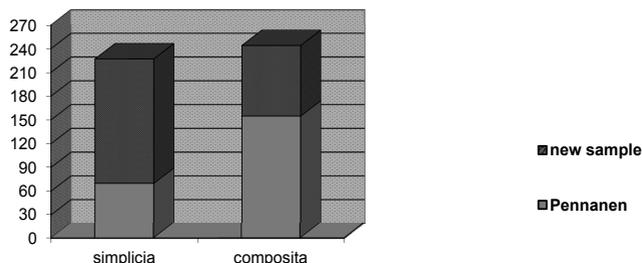
The overall results regarding the period of 1901-1960, eventually have slightly changed the picture at which Pennanen arrived: after the final addition of both analyses it is clear that the strongest three types from the first half of the 20<sup>th</sup> century are **Type II** (verbs from action nouns), **Type I** (verbs from agent nouns) and **Type IV** (nouns from adjectives). Type II highly outnumbers Type I – by more than fifty words - and is so even stronger than it seemed at the time of Pennanen’s analysis. The main reason of this new and a rather modified final result can be seen in the time-distance in which the additional research of the period in question was done. Language undergoes a continuous development – over the following fifty-year period after Pennanen’s analysis many new BFs have been introduced in the dictionaries and some processes that had started then or earlier have been completed. Comparing the situation in the 20<sup>th</sup> century with the previous period, Pennanen himself adds that “...since 1900, Type II has shown the larger and more rapid growth than before” (1966, p. 99).

Another important aspect of the process is the morphological structure of the BFs found, especially the relation of *composita* and *simplicia*. Over two thirds of items in Pennanen’s collection are compound words. He comments on this tendency in the following way: “After 1800 the proportion of *simplicia* and *composita* changed in favour of compounds. The older stock of simplex back-formations have grown obsolescent or died. The older stratum of composite back-formations has survived surprisingly well. ....The composite-based back-formations after 1800 represent an attempt to express a complex idea with a minimum of linguistic media” (1966, p. 146). Furthermore, he adds: “In recent years back-formation has mainly yielded composite verbs, but only a few sporadic substantives and adjectives. This illustrates the present-day need for nominal verb-compounds arising from the striving for concise, pregnant expression” (1966, p. 149).

Now we can look at the situation after comparison and addition of Pennanen’s analysis and that of the present work.

	Pennanen		New sample		Total
Composita	155	69 %	89	36 %	244 52 %
Simplicia	70	31 %	157	64 %	227 48 %
Total	225		246		471

Table 6: Numeral and percentage comparison and addition of compound and simplex items in Pennanen’s and in the new sample, regarding the period of 1901-1960



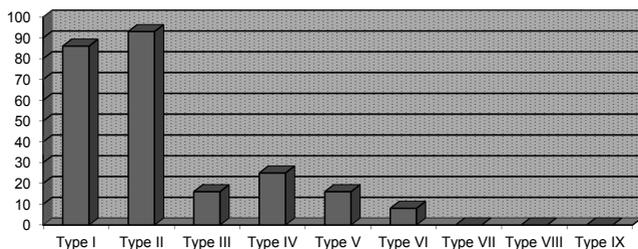
Graph 7: Representation of composita and simplicia in Pennanen's and the new sample, regarding the period of 1901-1960

Although the relation of compounds and simple items is numerically opposite in our additional research for the given period, after the addition the resulting overall tendency suggested by Pennanen has not proved untrue. Only, the difference is not so dramatic. Composita represent 52 % and simplicia 48 % in the overall result.

We can also look at the percentage share of individual types in the overall number of compounds for the whole material of the given period and find out which type produced the highest quantity:

	Pennanen	New sample	Total number of compounds	
Type I	69	17	86	35 %
Type II	69	24	93	38 %
Type III	15	1	16	7 %
Type IV	2	23	25	10 %
Type V	0	16	16	7 %
Type VI	0	8	8	3 %
Type VII	0	0	0	
Type VIII	0	0	0	
Type IX	0	0	0	
Total	155	89	244	

Table 7: Percentage share of individual types in the number of compounds in the period of 1901-1960



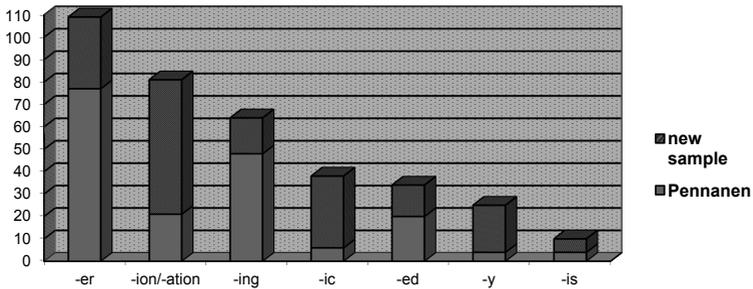
Graph 8: Percentage share of individual types in the overall number of compounds in the period of 1901-1960

The compound verbs (Types I-III), whether formed from agent nouns, action nouns or even from adjectives, absolutely outnumber the rest. In the results of BF of the first half of the 20<sup>th</sup> century, they represent 80 % of the share of all compound words and 41 % of the whole sample, which confirms Pennanen's statement of the vast influx of back-formed pseudo-compound verbs into the everyday written and spoken use of language. Of the rest, compound nouns from adjectives (Type IV) form 10 % of all compounds and 5 % of all back-formed words; the remaining groups are very small.

As for the suffixes involved in the process of BF, it is useful, again, to see the shares of both analyses as well as the overall numbers for the most frequent items.

Suffix	-er	-ion / -ation	-ing	-ic	-ed	-y	-is
Pennanen	77	21	48	6	20	4	4
New sample	32	60	16	32	14	21	6
Total	109	81	64	38	34	25	10

Table 8: Survey of the most frequent suffixes involved in back-formation in the period of 1901-1960



Graph 9: Representation of the most frequent suffixes in Penanen's study and in the present work and the overall results for the period of 1901-1960

It is clear from the data presented that the order of suffixes by their frequency is rather different in the two analyses. The most frequent suffix identified in Penanen's collection is *-er*, while in the new sample it is *-ion /-ation*. Suffix *-er* retains its first position, even after the addition. Suffix *-ing* is also considerably numerous in Penanen's material, but in the new sample it has been overcome by *-ic* and even by *-y*. The addition of the results has changed the situation and this suffix has finally proved to be the third most frequent one.

Regarding the style of words produced by the process of BF, Penanen points out the following: "Back-formations tend to arise on two different levels: they seem to crop up in everyday life and the various fields immediately connected with it, and secondly in different scientific, learned or abstract fields. (1966, p. 134)...One of traditional qualifications attached to back-formations is that they are colloquial, humorous, jocular, slangy, or else technical. Many are nonce-words, coined for the occasion only" (1966, p. 132). He presents a selection of such examples among the items of the 20<sup>th</sup> century: *ank, auth, bludge, chauffe, gramp, lech, mart, schlent, spinst, tute, verge, vive* (Type I); *blizz, crise, fascise, glam, hoke, junk, maffick, propagand, quisle, reluct* (Type II); *benevol, garrul, peeve, penure, repug, retice, shab, stinge* (Type III); *spike, warb, jank, snoot* (Type IV).

In the new sample of the present research unmarked BFs make up over one third and professional, technical or learned words from a variety of fields represent almost a half of the words found. There are many fewer slang or colloquial words. As already mentioned earlier in this work, the extremely high share of technical terms in my material and the low number of nonstandard items is a logical result of its additional character. Here, and definitely also in the other characteristics, the two collections and analyses are complementary, providing together a more comprehensive picture of the situation in the first half of the 20<sup>th</sup> century.

Another interesting finding of Pennanen's collection is the fact that some BFs appeared for the first time in fiction and he introduces some authors in whose works BFs were first instanced, among others those of the 20<sup>th</sup> century: Kipling: *night-walk* 1903; Shaw: *book-keep* 1901, *prize-fight* 1904, *slave-drive* 1907; Wells: *shop-walk* 1905); Masefield: *lech* 1911; Galsworthy: *bludge* 1924; *vive* 1928; Lewis: *shadow-box* 1924 (1966, p.136). In my research, I have found another of G.B. Shaw's BFs: *stupend* v. < *stupendous* adj., "to amaze, dumbfound" (OED4).

As far as regional connotation is concerned, Pennanen states that the great majority of recent BFs is of American origin and explains this by a greater flexibility of American English as a result of its multicultural character (1966, p. 143). Regionally coloured BFs in the new sample form 14%, being mostly of American origin or use.

#### **7.4 Conclusion**

Based on my study of Pennanen's material together with the new collection, description and analysis of relevant words, I have come to the conclusion that the first half of the 20<sup>th</sup> century can be considered as the most active, most dynamic and productive period in the development of the process of BF in its whole history. To Pennanen's material consisting of 225 BFs, another 234 BFs of the same typology have been added, described and classified and their relations have been demonstrated in the analyses. It has been shown that the richest category is Type II, producing verbs from action nouns. From the morphological point of view, compounds outnumber simplex items by about 4 %, with the biggest share represented by Type II, which is tightly followed by Type I, both being verbs. The most frequent suffix subtracted in the process of BF in the first half of the 20<sup>th</sup> century is *-er*, typical of agent nouns in terms of Type I. Other two highly frequent suffixes are *-ion* /*-ation* and *-ing*, all of them occurring mainly in action nouns in terms of Type II. This all confirms the idea that BF takes an important part in forming verbs in English (together with conversion and affixation).

Words formed by BF occur in a variety of fields of life and many of them are stylistically coloured, with the connotation ranking from nonstandard (slang words) over colloquial up to highly standard words – technical terms and learned vocabulary. Slang nature is often connected with regional connotation, such words are most often Americanisms.

In the present research, apart from the six types suggested by Pennanen, I also included prefix and inflectional BFs, indicated as Type VIII and Type IX, respectively. Eight items have been identified for Type VIII and four for Type IX. Prefix BFs found are mainly based on the relation of antonymy and hyponymy and they are represented by various parts of speech – nouns, adjectives and verbs. They are morphologically simplex and often belong to technical

terminology. Inflectional BFs in our sample result from subtraction of either actual or wrongly interpreted plural suffix. They are monomorphemic and stylistically neutral. Type VII in our typology is only relevant for the following period, so it is empty so far.

After the addition of the two categories to the material described above, the total number of back-formed items of any type formed during the period of 1901-1960 is presently 471. Inasmuch as new corpora including more and more texts from this period are or will be compiled, there is a strong possibility that some following research will identify other relevant items and furthermore increase the present number.

## 8 BACK-FORMATION IN THE SECOND HALF OF THE 20<sup>TH</sup> CENTURY

### 8.1 Description and analysis of BFs from the second half of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century: a new sample of 229 items

In his study Pennanen (1966) investigated the rise and history of BF in English from the 13<sup>th</sup> century until the early 1960s of the 20<sup>th</sup> century. Since the main objective of this work is to describe the further development of this process at present, to highlight its main characteristics and suggest prevailing tendencies in its future, I decided to start where Pennanen ended, i.e. from the 1960s, to collect as much material as possible from the period till the beginning of the 21<sup>st</sup> century, and after a detailed analysis to find out which of Pennanen's findings can be confirmed, or, on the other hand, what has changed within this process, and which processes that started then have been completed now.

The present chapter provides a description and analysis of BFs attested in dictionaries for the second half of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century. It is based on the sample of 229 BFs excerpted from the same set of dictionaries as that used for the previous period (see Chapter 6) and from monographs by contemporary authors (again the sample is not to be taken as definitive). In my categorization of the material collected, I continue applying Pennanen's typology (Types I - VI), which I have extended by three other Types (VII - IX).

The first half of the 20<sup>th</sup> century seems to have been the most fruitful and dynamic period in the whole history of this word-formation process. This trend did not stop; therefore, as far as the distribution of new BFs over the present five decades (from the 1960s to first decade of the 21<sup>st</sup> century) is concerned, I naturally expected that the highest numbers of items would be found for the first decade of the period, since new lexemes come into dictionaries slowly and gradually. There are also a considerable number of very recent words in the sample; therefore the degree of stability of different words in the lexicon can vary.

All the words together with their meanings are listed in Appendix III.

#### 8.1.1 TYPE I: verb from agent / instrument noun

*play-make < play-maker / lase < laser*

Distribution of the items over the period confirms the expectation – most of them (seven) were formed in the first decade. There is, on the other hand, also a considerable portion of newer words in the 1970s and 1980s (seven and eight respectively).

The group comprises almost the same number of nouns referring to persons and those referring to inanimate objects or phenomena. *Day sailer* and *helicopter* refer to means of transport, *Windsurfer* (a proprietary name) to a kind of sailboard, *volumizer* to a substance, *incentive* and *mind-blower* to abstract entities. *Windsurfer*, however, also has another meaning: “a person who engages in the sport of windsurfing, a sailboarder” (OED4).

This category is characterized by a large number of compounds consisting of originally independent morphemes (*front-load*, *roller-coast*, *shake-dance*, and others). Among the simplex words, there are an unusually large number of monomorphemic words (ten), e.g.: *buff*, *deal*, *lase*, *mase*. The suffix *-er* is the most frequent one subtracted in this process. There are only two other suffixes: *-ian* in *comedian* and *-ive* in *incentive*.

This type includes a high number of unmarked words – half of the material. There are fewer technical terms and learned words than usual – only six, out of which some are even not explicitly indicated as technical in the dictionaries, but the quotations of their occurrence come from journals of scientific type (e.g. *lase* – “New Scientist”, *mase* – “Engineering”, etc.). *Comede*, a fairly young item, is an informal word with jocular connotation, which is not unusual with neologisms. *Jackroll* has a general meaning “to rob a drunken or sleeping person”, but it comes from South African slang, where *jackroller* refers to “a member of a criminal gang in Soweto”. *Tase* and *windsurf* are, by their origin, American trademark / proprietary names, generally also used with lower case initial letters.

A fairly high number of words are geographically coloured; apart from the mentioned South-African *jackroll*, other words come from or are used in the USA (*front-load*, *play-make*); *lime* is an expression used in the West Indies. There are seven slang words, e.g. *hot-dog* (surfing), *play-make* (basketball), *shake-dance*, or *skirt-chase*. The slang word *ass-lick* is described as rude and derogatory.

*Helicopt* is not included among modern English compounds in our analysis, although historically, the source word, *helicopter*, consists of two roots. In comparison with the “more transparent”, contemporary compounds (e.g. *blow-dryer*), this word has the historical morphological boundary between the components in a different place than a common speaker now expects and understands: it is between *helico-* and *-pter*, based on Greek words *helix* (“spiral”) and *pteros* (“having wings”). The shift of this boundary by speakers “to the left” in this word – *heli* + *copter* – can be confirmed by newly formed compounds, using *heli-* as a combining form, e.g. *heli-skiing*, *heli-boarding* or *heli-taxi*. In addition, this shift also explains the speakers’ reanalysis and identification of the ending as the suffix *-er*. The origin of

*helicopter* explains why the part which is subtracted from this source word is a supposed rather than actual agent (or instrument) suffix, subtraction of which yields the verb *helicopt*.

Another three items also seem interesting from the point of view of their origin: *lase*, *mase* and *Tase*. What they have in common is the fact that they all come from acronyms: *laser* (“light amplification by stimulated emission of radiation”), *maser* (“microwave amplification by stimulated emission of radiation”) and *Taser* (“Tom Swift’s electric rifle” - fictitious weapon, after *laser*). Therefore, the ending *-er* is not originally a genuine agent suffix, but, on the other hand, it is highly probable that the creators of the acronyms shaped the nouns deliberately into the forms identical with agent / instrument nouns. Then, the resulting verbs are a logical outcome of the BF processes here.

### 8.1.2 TYPE II: verb from action noun

#### *queue-jump* < *queue-jumping*

This traditionally numerous type is represented by the highest number of items found in the sixties (sixty-five) and also a fairly large number in the following period (thirty-nine). The process still continues, which is evidenced in the occurrence of a fairly high number of more recent items in the 1980s (twenty) and also three words in the 1990s (*carjack*, *computer-generate*, *drop-ship*).

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 an action. The only five slightly different ones are *bibliography*, *concordance*, *one-handedness*, *role-taking* and *tumescence* referring to a state or result of a process rather than to an action: *bibliography* 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* is “an alphabetical arrangement of the principal words contained in a book, with citations of the passages in which they occur”; *role-taking* refers to a state of mind and *tumescence* means “becoming tumid, swelling up; a tendency to tumidity”. *One-handedness* 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.*”

Each category contains at least two types of structures as usual: examples of compounds of full forms are *back-talk*, *drop-ship*, *drownproof*; compounds with combining forms (neoclassical) are, e.g., *hydroborate*, *microinject* and *photoduplicate*. Simplicia include monomorphemic verbs (e.g. *event*, *grice*, *ovate*) and derivatives (e.g. *adenylate*, *deconstruct*, *divisionalize*). Compounds absolutely prevail, especially due to the high proportion of verbs back-formed from compound verbal nouns such as *feather-bed* < *feather-bedding*, *red-cook* < *red-cooking*, or *shrink-wrap* < *shrink-wrapping*.

The most frequent suffixes in this group are *-ing* and *-ion* / *-ation*, with the former slightly prevailing. The suffix *-ing* typically occurs in verbal action nouns, which are the richest source of back-formed verbs. The other suffixes are sporadic; *-is* occurs four times, others only once or twice. In comparison with the previous material, there are a few suffixes which have not appeared yet within this type: *-er*, *-manship* *-ment*, *-ness* and *-n*. The last one is rather specific, being the suffix of a German source word *wedeln* (“a skiing technique first developed in Austria in the 1950s”).

Similarly as in the previous period, there are many words presented in dictionaries as unmarked but in fact fairly limited in use to a specific field of human activities. Thus *concord* (“to rearrange the words of a text in the form of a concordance”), e.g., is used in the given meaning in the practice of writing books, *cybernate* regards the use of computers in the area of manufacturing, *divisionalize* is a term tightly connected with organization of companies; *drop-ship* and *interline* are involved in trade and services, *micropropagate* is connected with the field of gardening and forestry, etc. Furthermore, there are some verbs in the group which are not indicated as learned, but by their foreign origin (mainly Latin / Greek), their higher level of formality, and also their occurrence in scientific texts, they seem to be part of learned vocabulary. Examples are: *disinform*, *gentrify* or *reconfigure*. The portion of technical terms is fairly large, the terms frequently come from natural sciences, namely biology, physics, chemistry and others; exceptions are philosophy, military, music, economy, grammar, politics or skiing.

*Back-talk* was originally a dialectal word; it demonstrates the transition of a word from the substandard stylistic layer towards the neutral standard, being now in the phase of colloquial value.

*Decriminalize* is introduced in OED4 as having two meanings, of which one is presented as ‘rare’: “to reform (an offender or one with criminal tendencies) through psychiatric treatment”, and the word is used in a text with inverted commas (1963 Punch 26 June 915/3: *The Mentor carries news of ‘decriminalizing’ through psychiatry.*). The other meaning, “to legalize”, is

apparently not considered so much unusual and it is used in the text of its first occurrence normally as a neutral lexeme (972 Sat. Rev. Sci. (U.S.) 15 Apr. 21/3: *The recommended removal of all penalties for the private possession of marihuana would do much to decriminalize a large number of those involved with this drug.*)

*Car-jack, forthold, job-share, paddock-graze* and *queue-jump* are examples of resulting compound verbs where the first constituent is the direct object of the verb (cf. \**meat-eat* vs. *law-break* in Chapter 3 above).

*Nitpick* appears in different dictionaries as a result of different source words: MW's CD suggests the action noun *nick-picking*, while OED4 the agent noun *nitpicker*. The resulting verb *nitpick* has been classified in the present work as belonging to Type II based on its semantic definition: "to criticize by nit-picking / to engage in nit-picking".

Similarly *tumesc* is described in OED4 as a result of noun *tumescence*, while in some other dictionaries (e.g. Random House Dictionary) the adjective *tumesc* is considered to be the point of its departure. Although the definition invites to classify it in Type III ("become tumescent"), its inclusion in Type II in the present work was motivated by the date of its first occurrence in OED4 (1966) which is earlier than that in Random House Dictionary (1970).

In the case of the pair '*one-upmanship* > *one-up*' (MW's CD), Bauer (1983) presents a different resulting verb: *oneupman*, which is not found in any of the dictionaries used in the present work, but it has been recorded on various Internet pages, having the same meaning as I present here.

The source noun *gay-bashing* is described in OED4 as a synonym of *queer-bashing* ("attacking homosexuals"). The nouns have the same meaning, but the latter has not been followed by the institutionalized back-formed verb in dictionaries yet. However, there are already some occurrences in informal discussions on the Internet (Google), which indicates the same development line as in the case of *gay-bashing* > *gay-bash*.

The verbs *skateboard* and *snowboard* are not explicitly presented as back-formed, but the conclusion that they are BFs is based on several facts. Firstly, the nouns, actually names of sports, *skateboarding* and *snowboarding*, were formed by derivation from the nouns *skateboard* and *snowboard* (both referring to a specific type of board). Secondly, the verbs were recorded slightly later than the respective action *-ing* nouns in both cases: *skateboard* four years later and *snowboard* one year later (OED4). So, the sequence of the members of each "family" is likely to have been: (instrument) noun – (suffixed action) noun – (back-formed) verb.

One of the rare colloquial verbs in the material, *yuppify*, back-formed from the action noun *yuppification* has an interesting history. It is based on the noun *Yuppie* formed originally as a

jocular term for a member of a socio-economic group comprising young professional people working in cities. The noun originates from the initial letters of *young urban professional*, now also frequently interpreted as *young upwardly mobile professional*, *yumpie* (OED4).

The source noun *deconstruction* has been in use since 1882 (OED4), having the meaning of “the action of undoing the construction of a thing”. The back-formed verb, *deconstruct* (1973), however, is related to the noun’s other meaning, which is restricted to philosophy: “a strategy of critical analysis associated with the French philosopher Jacques Derrida, directed towards exposing unquestioned metaphysical assumptions and internal contradictions in philosophical and literary language”, and the year of its first record is the same as that of the verb (1973).

Some of the verbs come from fairly “old” nouns, so there is a rather long time gap between the source and the resulting item. This means that the nouns already existed in the time of Pennanen’s research, but they were only “prepared” to yield BFs. The process was finished in the second half of the century. Examples are (OED4): *microinjection* (1921) > *microinject* (1974), *predation* (1932) > *predate* (1974), *red-cooking* (1956) > *red-cook* (1972), *panic buying* (1942) > *panic-buy* (1974), *demerger* (1948) > *demerge* (1980), *eutrophication* (1947) > *eutrophicate* (1970).

*Ovate* belongs to the youngest BFs and it is listed in Ayto’s *The Longman Register of New Words* (1990). The author, comments on this item in the following way: “This intransitive use is a new development, but the word is actually recorded a couple of times in the mid-19<sup>th</sup> century with an object” (p. 234). The noun *ovation* was first recorded in 1831; the back-formed intransitive verb *ovate* (1988) is presented as arising in 1988. Before this new item appeared, the converted verb *ovation* had also existed, namely since 1894.

On the other hand, there are verbs in this category, which were formed in the process of BF very soon after the first occurrence of their source noun. We can thus consider both members of such pairs as neologisms. These are, for example (OED4): *job-sharing* (1972) – *job-share* (1982), *proaction* (1986) > *proact* (1986), *car-jacking* (1991) > *carjack* (1991).

### 8.1.3 TYPE III: verb from adjective

#### *hard-wire* < *hard-wired*

This type is marked by a considerably lower number of items than the previous types. In the “competition” of sources of new verbs in English BF, this source is thus not very productive and it is clear that English back-formed verbs generally tend to result mainly from action nouns. Within the second half of the 20<sup>th</sup> century, the decade of the 1970s was the most productive in

the formation of this type against the general trend within the other types where the period of 1960s has traditionally the highest numbers of items recorded in dictionaries.

The high number of items with the meaning of “result” logically corresponds with the form of the respective source adjectives – they are past-participial adjectives ending in *-ed*. Such a form directly invites the formation of a verb and generally is among the most frequent source forms of this category. As for the other meanings, “feature / quality” occurs with four items, e.g. *ripsnorting* or *skeevy*; an example of “relation to ability” is *biogradable* and “relation to an action” occurs with, for instance, *self-financing*.

The high share of compounds is not very surprising, as the compound past-participial adjective is one of traditional sources of compound verbs, where reanalysis takes place (see Adams, 2001). Examples are: *hard-wire*, *phase-modulate*, *self-finance*. *Biodegrade* is an example of a neoclassical compound, *anonymize* is a derivative and *Dolby* or *skeeve* are monomorphemic verbs. The suffixes of the source words are in perfect agreement with their meanings: *-ed* for the most frequent result, *-ing* for the action or ability, *-y* for the quality, *-able* for the ability and *-ive* for the action.

Though small, the group is not stylistically homogenous: there are six neutral items (e.g. *anonymize*, *self-finance*, *steel-face*), five technical terms (e.g. *hard-wire*, computing; *phase-modulate*, telecommunications) and two slang words (*gobsmack*, *skeeve*). Geographical connotation involves mainly Americanisms (e.g. *skeeve*, *tenure*), *gobsmack*, on the other hand, is a British English slang word.

The intransitive verb *auto-destruct*, which appeared in the 1980s, is a synonym to the older back-formation, *self-destruct* (1969). The latter is traditionally interpreted as a BF from the action noun *self-destruction* (e.g. Aronoff, 1976, p. 28; Cambridge Grammar of the English Language, 2002, p. 1638). On the other hand, *auto-destruct* is presented in OED4 as a BF from the adjective *auto-destructive*. Taking into consideration the order of the first occurrence of the two verbs, we cannot exclude the idea of simply analogical formation of the more recent verb (*auto-destruct*) according to the older one (*self-destruct*).

For the verb *Dolby* (1977), two possible source verb forms are suggested by OED4: *Dolbyed* or *Dolbyized*. In the case of the acceptance of the latter form, the resulting verb would probably be *to Dolbize*. This would analogically correspond with a similar type, *to Finlandize* (1970-75), which is, however, interpreted as back-formed from the noun *Finlandization*.

*Skeeve* is a verb presented in OED4 with two meanings, of which the first (“to disgust (someone), to repel; to make uncomfortable”) appeared for the first time in the eighties, and the

other (“to loathe a person or thing; to dislike intensely”) was recorded later – at the beginning of the nineties.

#### 8.1.4 TYPE IV: noun from adjective

##### *ditz* < *ditz*y

Type IV is the most numerous of the “non-verb” categories. The number of items in individual decades is almost equal (six to nine), no relevant item has been found for the very last period. Most adjectives in the group express feature / quality, e.g. *shonky*, or *tacky*. Three others are close to the meaning “belonging to a class”: *methanogenic*, *piscivorous* and *somatotrophic*, two are related to a state: *alexitymic* and *psychedelic*, one to an activity: *paramedic*, one to a place: *prelectum*, and finally two are the result of the previous action: *gorked* and *transgenic*. Names of persons and things / abstract entities are represented by an almost equal number of items. Examples of persons are *ditz*, *grunge*, or *paramedic*; things / abstract entities are, e.g., *anaphor* or *supramolecule*. *Piscivore* refers to an animal and *methanogen* to an organism.

The group is characterized by a fairly high number of monomorphemic words, e.g. *ditz*, *flash*, *glitz*, *gork*, etc. An interesting fact is that all the slang words in the group (six) are at the same time monomorphemic. This is probably because of the spoken medium, in which such slang words come into being and are thus an evidence of a general speakers’ tendency to make the least effort in the production of speech. There are only five compounds in this class: *alexithymia*, *paramedic* (neoclassical), *piscivore*, *supramolecule* (neoclassical) and *tight-ass*.

While in the material of the first half of the 20<sup>th</sup> century, the suffix *-ic* formed more than 50 % and *-y* about 18 %, the situation in the second half is different: these two suffixes are almost equally represented. The others are sporadic: *-ed* (*gorked*), *-al* (*paramedical*), *-ous* (*piscivorous*), *-ar* (*supramolecular*).

The group contains a slightly higher number of regionally marked words than other groups (40%), mostly Americanisms, but also one Australian slang item (*shonk*) and a British colloquial word (*strop*). There are surprisingly more colloquial items than usual and almost the same number of technical terms. The words from section “unmarked” might be considered to be very close to technical terms because of their specific meaning and foreign origin: e.g. *anaphor*, *piscivore*, *psychedelia* and *supramolecule*. *Synesthete* is not described in the dictionaries as a technical term, but it could be so classified according to its records in psychological texts quoted in OED4. Out of the six slang words, four are regionally marked (e.g. *skeeve*, *grunge*), one of them is Australian (*shonk*).

*Flash* belongs to neologisms collected by Ayto (1990). Its introduction in The Longman Register of New Words is commented on in the following way: “This sense of *flash* was quite common in the 18<sup>th</sup> and 19<sup>th</sup> centuries, but it appears to have died out, and this modern use is probably a new BF on *flashy*, or a conversion of the adjective *flash*” (p. 135). *Paramedic* (1970) < *paramedical* (1921) is an example of pair where there is a long time gap between the occurrence of the source word and its BF.

The noun *psychedelia* deserves commentary: it seems that in this formation from an adjective to a plural noun one step was omitted – the potential singular noun *\*psychedelium* - and the plural noun was created directly. This case is at the same time an example of such BFs where the resulting word is not shorter than the source word.

*Skeevy* is a word that has appeared earlier in the present analysis – in Type III (verb from adjective). This means that the adjective *skeevy* has produced by BF two different parts of speech, a verb and a noun. The meanings are related.

*Un-hero* is an interesting item, commented on by Ayto: “It is hard to tell whether the meaning is intended to differ from that of *antihero* (OED4: ‘one who is the opposite or reverse of a hero; esp. a chief character in a poem, play, or story who is totally unlike a conventional hero’), which has been established for almost a century” (1990, p.334).

### **8.1.5 TYPE V: noun from another noun which is believed to be its derivative**

#### ***eco-label < eco-labelling***

The richest decade in terms of forming this type is the sixties. No item has been found for the latest period.

There are only two meanings appearing in the source nouns – action / process (e.g. *cineradiography*, *eco-labelling* or *trunking*) and abstract entity / state of mind (e.g. *computer-phobia*, *hyponymy*, *intertextuality*). Most of the resulting BFs refer to a thing / abstract entity, e.g. *shrink-wrap*, *hyponym* or *intertext*. *Trunk* is an exceptional example of action (and probably for that reason colloquial); *grantsman*, *computer-phobe* and *homophobe* refer to persons.

The words of this category are mostly morphologically complex. Compounds form 63 % (e.g.: *fact-find*, *idiotype*) and there is only one monomorphemic word (*trunk*). The type is characterized by a high share of neoclassical compounds, containing combining forms, e.g. *homo-*, *idio-*, *-graph*, or *-phobe*. The noun *cineradiography* is even a composition of three different combining forms. As for suffixes, the situation is opposite to that of the first half of the 20<sup>th</sup> century: the most frequent suffix here (*-ing*) was marginal in the previous period, while at the same time, the suffix that used to appear most frequently then (*-ia*) is represented only twice.

In this type technical terms slightly prevail over unmarked words (e.g. *cladist*, *idiotype*); there is one Americanism (*grantsman*) and one colloquial item (*trunk*). Two of the technical terms, surprisingly, come from the humanities (*hyponym* and *intertext*).

The noun *fact-find* is among the latest BFs (1989), however its source noun (*fact-finding*) dates back to the first decade of the 20<sup>th</sup> century (Ayto, 1990). However, this source word produced also a verb (1953) belonging to Type II, which is one of the items in Pennanen's sample of BFs from the first half of the 20<sup>th</sup> century.

In the case of the word *intertext*, we can see an interesting "gradation" of the BF process: *intertextuality* > *intertextual* > *intertext*. It resembles a sort of mirror to scales such as *habit* > *habitual* > *habituality*, *spirit* > *spiritual* > *spirituality*, etc.

*Trunk* is a noun with a large variety of meanings, having been in use for over five centuries. The back-formed item here represents a new meaning arising in the sixties of the 20<sup>th</sup> century and added in the OED4 in 1993.

### 8.1.6 TYPE VI: adjective from abstract noun

#### *intertextual* < *intertextuality*

This type forms one of the smallest groups in the second half of the 20<sup>th</sup> century. There is no item found for the last decade. Most of the items come from a source noun referring to an abstract entity (e.g. *fluidics*). *Complicity* refers to a state ("association or participation in or as if in a wrongful act"), *desertification* denotes an action.

There are no compounds; in addition, there are no monomorphemic items as all the resulting adjectives are composed of more than one morpheme, e.g. *disertified*, *capitated*. The suffix *-s*, which was expected to be typical of this category, based on the analysis of the previous period, is not the only one involved here.

Situation in this class is very similar to that of the first half of the 20<sup>th</sup> century: there are neither colloquial nor slang words nor any regionally marked ones. Most of them are, however, derived from the name of a special area or system and thus they are partially limited in use to that specific sphere: health-care (*capitated*), technology (*fluidic*), genetic engineering (*genetic*). Only one item is explicitly indicated in the dictionary as a technical term (*intertextual*).

*Fluidic* was back-formed from a plural noun (*fluidics*), which is, however, used with a singular verb. The meaning of this back-formed adjective is "designed or operating in accordance with the principles and techniques of fluidics" (OED4). It has another two meanings: "of the nature of a fluid" and (spiritualism) "of or belonging to a supposed supersensible

‘double’ (of ‘fluid’ or ethereal consistence) possessed by every being”, which are based not on BF but on derivation (*fluid* + *-ic*) in the 19<sup>th</sup> century.

According to Ayto (1990), the source noun *genethics* was apparently formed as a blend of *genetics* and *ethics*.

### 8.1.7 TYPE VII: adjective from agent noun

#### *do-good* < *do-gooder*

In the material from the second half of the 20<sup>th</sup> century, several items are found which seem not to belong to any of the categories established by Pennanen (1966). Although this category is very little, the items are characterized by certain common, typical features, the existence of which supports the idea of considering them as another type of BF. Therefore they deserve certain attention:

#### 1. *carburetted*

MW’s CD: **1972**, adj. f. *carburettor* agent n.; equipped with a carburettor; OED4: chemistry

The source word is an agent noun referring to a device, instrument. The process of word-formation is presented as BF, but it reminds of resuffixation, i.e. BF followed by a new affixation: *carburettor* (*carburet* + *-or*) → *carburet* (v.) → *carburetted* (*carburet* + *-ed*). As the middle degree (the verb) is missing because it was formed differently - through derivation *carb(on)* + *-uret* (a suffix used in chemical terminology, identical in sense with *-ide*, which has now generally replaced it: *carburet* (now *carbide*) (D.com), we can assume BF here. The adjective *carburetted* itself invites to be seen as a derivative of the verb *carburet*, but when we take into consideration the semantic content of the adjective (“equipped with a carburettor”), we have to agree with BF. To be extremely explicit, in agreement with the semantic definition, we would expect a derivative “*carburettored*”, which does not exist, however, perhaps because of its complexity and awkwardness. Stylistically the word is described as a term in chemistry (OED4).

#### 2. *do-good*

D.com: **1965-70**, adj. f. *do-gooder* agent n. (Americanism); a well-intentioned but naive and often ineffectual social or political reformer, of or befitting a do-gooder; OED4: disparaging sense

The word also functions as a noun (having been in use since the 17<sup>th</sup> century); the function of adjective is modern use and it originated in the U.S. Derivatives *do-gooding* (ppl. adj. and vbl. n.), *do-goodism* and *do-goody* (adj.) carry all the disparaging sense of *do-gooder*. They look

like having been derived from the non-existent compound verb “*to do-good*”, which could normally be expected as a resulting BF from the agent noun *do-gooder*. They are probably derived in the same way as the agent noun *do-gooder*, i.e. from the phrase *do good*.

### 3. *teenybop*

OED4: **1966**, adj. f. *teenybopper* agent n.; a girl in her teens or younger, esp. one who is a fan of pop music and follows the latest fashions; colloquial: of, pertaining to, or consisting of teenyboppers; example sentence: ‘*The three British-born Bee Gee brothers, whose recent success has overshadowed the considerable fame they achieved as teenybop idols in the mid-Sixties*’ (OED4).

The source word is a compound agent noun (teen + -y + bopper = a fan of bop). The word has a colloquial stylistic connotation. It perfectly meets the regular requirements for being a BF: subtracting a suffix, resulting in a shorter form. The verb “*to teenybop*”, which would be logically expected as the direct BF of the agent noun, also exists, however, it is probably the result of conversion and not BF, apparently for semantic reasons: the first element of the compound qualifies the age of the agent, it is a sort of its attribute and not the potential object or adverbial complementing the potential verb in the compound.

As the above examples show, there is certain regularity in the character of this “new” category, found in the material from the second half of the 20<sup>th</sup> century. The source word is an agent noun, the resulting one is an adjective. None of the words is stylistically neutral; *carburetted* is a technical term, *do-good* is of American origin and has a tinge of slightly disparaging sense, *teenybop* is colloquial. As far as the form is concerned, one is a simple word, the other two are compounds. Both the compounds are semantically related to a person characterized by unusual behaviour (a young fan of rock music, a naive and often ineffectual reformer). The simple item is different – it is related to an object and has a form of participial adjective.

#### 8.1.8 TYPE VIII: prefix BFs

##### *flappable* < *unflappable*

The group contains the same number of items as the material of the first half of the 20<sup>th</sup> century. The richest period is that of the sixties, later, only four items have been found, with two coined in the first decade of the 21<sup>st</sup> century.

As usual, the most frequent meaning of a prefix subtracted is negation, so antonymy is the most frequent relation between the source and the resulting word. Examples are *flappable* <

*unflappable*, or *concerting* < *disconcerting*. Hyponymy is also represented, namely by two items: *patriate* (resulting) has a more specific meaning than *repatriate* (source), referring to legislation only; on the other hand the meaning of *phoresis* (resulting) is more general than *plasmaphoresis* (source), 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 and 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 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).

Unlike the previous period, there are more adjectives than nouns; there is only one verb (*patriate*). There are no compounds; morphologically complex words prevail, e.g. *flappable*, *concerting* or *phoresis*. The group contains only three monomorphemic words: *ilch* (slang), *plore* (introduced deliberately by a scholar) and *urb* (informal). Typically, these are all marked in various ways. Regarding prefixes, situation here is very similar to that of the first half of the 20<sup>th</sup> century: none of the prefixes occurs more than once. Most of them are fairly common (*un-*, *dis-*, *a-*), but there are exceptions. The part of the source word that is dropped in *zilch* (*z-*) is apparently considered to be semantically a negation prefix, similarly as, e.g., *a-* in *atheist*. *Plasma-* in *plasmaphoresis* should rather be classified as a combining form of a compound than a prefix – it exists as a separate word with the same meaning and is often combined with other words to form compounds, e.g. *plasmagen*, *plasmisphere*, etc.

From the stylistic point of view, the group is traditionally diverse: three unmarked words (e.g. *flappable*), two marked regionally (*ilch*, *patriate*), two informal / colloquial (*concerting*, *urb*), one slang word (*ilch*) and two technical terms (*patriate*, legislation; *phoresis*, medicine).

In the case of *concerting*, the resulting back-formed word is an adjective. The noun *concerting* exists (verbal noun of the verb *to concert*), but means “singing or playing in concert”. *Plore* is one of the rare items with which we know the person who coined it. Ayto adds: “*Plore* is a term introduced by Professor Richard Gregory to describe the exhibits in his Exploratory, an innovative museum of science opened in Bristol in 1987” (1990, p.247).

Two items in the sample (*concerting* and *ilch*) come from the research implemented by an undergraduate linguistic class at Rice University, Houston, Texas, USA, during the fall of 2003, led by a professor Suzanne Kemmer<sup>16</sup>.

### 8.1.9 Type IX: inflectional BFs

#### *gigaflop < gigaflops*

Only two items of this category have been found: *gigaflop* and *megaflop*. They both come from 1976 and are used as technical terms in computing. The ending *-s* is a typical example of reanalysis, since it is taken as plural morpheme and subtracted in order that the supposed singular is reached. However, both source items are neoclassical compounds formed from combining forms *giga-* / *mega-* and an acronym from “floating-point operations per second” - so the final *-s* is only the last initial of the acronym and not a plural suffix.

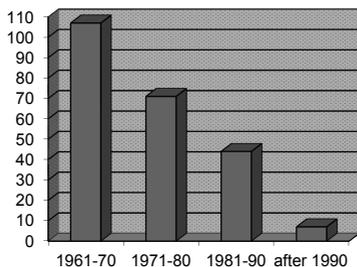
### 8.2 Summarizing analysis of the sample from the period after 1961

The overall number of back-formed words found for the period investigated is 229. As far as the distribution of items in the second half of the 20<sup>th</sup> century is concerned, the highest number of BFs has been found for the first decade. Then, as shown in Graph 10, we can see a fairly smooth trend of decrease towards the end of the period.

	1961-70	1971-80	1981-90	after 1991	Total
Type I	15	7	8	1	<b>31</b> 14 %
Type II	64	39	20	3	<b>126</b> 55 %
Type III	5	9	2	1	<b>17</b> 7 %
Type IV	9	6	9	0	<b>24</b> 11 %
Type V	7	3	2	0	<b>12</b> 5 %
Type VI	1	3	2	0	<b>6</b> 3 %
Type VII	2	1	0	0	<b>3</b> 1 %
Type VIII	4	1	1	2	<b>8</b> 3 %
Type IX	0	2	0	0	<b>2</b> 1 %
Total	<b>107</b> 47 %	<b>71</b> 31 %	<b>44</b> 19 %	<b>7</b> 3 %	<b>229</b>

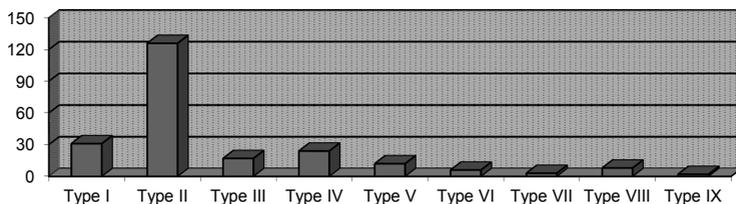
Table 9: Number of items in individual decades and the total number of all items in the period after 1961

<sup>16</sup> Results of this collection of neologisms are accessible at <http://www.ruf.rice.edu/~kemmer/Words/info.html>.



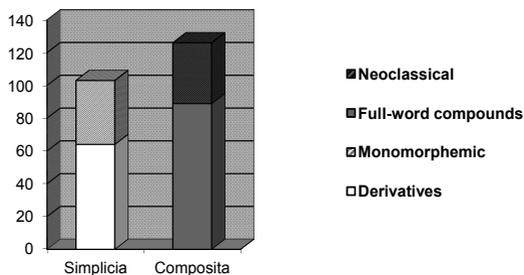
Graph 10: Development of the process of BF over the period after 1961 – numbers of BFs of all types found in individual decades

Regarding the occurrence of individual types, Type II (126 verbs from action nouns) absolutely outnumbers the other types. It represents more than a half of the whole material of the period. Of the rest, only Type I (verb from agent noun) and Type IV (noun from adjective) reach significant numbers, thirty-one and twenty-four respectively. The other types contain fewer items than twenty. A similar structure was discovered in the material from the first half of the 20<sup>th</sup> century, only the gap between Type II and the rest was not so substantial. Certain surprise can be seen in a relatively high number of prefix BFs (eight items), equal to the number of those identified in the previous period.



Graph 11: Representation of individual types over the whole period after 1961

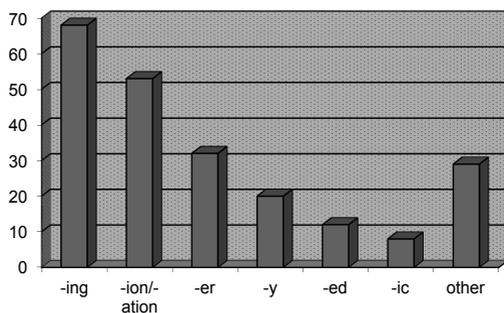
As far as the morphological structure of the words is concerned, there are more compounds than simple items. Composita of any kind represent altogether 55 % (126 items) of the material. The most numerous group is that of compounds consisting of full words (89 items, 39 % of all BFs in the given period). Within simplicia, which form 45 % of the whole material, derivatives prevail over monomorphemic words.



Graph 12: Shares of individual morphological structures over the whole period after 1961

The most frequent suffix subtracted from the source words is *-ing*, occurring mainly in Type II (verb from action noun). Also the second most frequent suffix, *-ion / -ation* is involved mainly in Type II. The relatively high share of the suffix *-er* is especially due to the source agent nouns in Type I (and VII). Suffixes *-y*, *-ed* and *-ic* are typical of the source adjectives in Type IV. The high frequency of these particular suffixes is in direct connection with the order of types according to the number of their items: Type II is the richest category, followed by Type I and Type IV respectively.

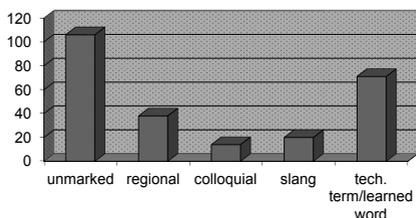
The other suffixes appear only twice or even once: *-able*, *-al*, *-ance*, *-ar*, *-ence*, *-ia*, *-ian*, *-is*, *-ism*, *-ity*, *-ive*, *-ment*, *-n*, *-ness*, *-or*, *-ous*, *-s*, *-ship*.



Graph 13: Representation of individual suffixes subtracted over the whole period after 1961

Most of the words are stylistically unmarked. These form almost a half of the whole material. The number of technical terms is also fairly high – one third. Regional connotation is slightly higher than expected: it involves mainly Americanisms; there are a few exceptions: one South-African, one Australian, two British and one Canadian word. Technical terms are predominantly terms of natural sciences, exceptionally of humanities or other areas of life, e.g.

philosophy, literary theory and linguistics, legislation and politics, army, or skiing. There are very few colloquial and slang words. These words are often at the same time regional expressions, e.g. the only South-African word (*jackroll*) is a slang word; so is the only Australian one (*shonk*). One of the British expressions is colloquial (*strop*), the other is slangy (*gobsmack*). The Canadian word (*patriate*) is also marked – it is a term used in legislation.



Graph 14: Proportions of unmarked and stylistically and regionally coloured words in the material over the whole period after 1961

### 8.3 Conclusion

For the second half of the 20<sup>th</sup> century, 229 new back-formed words were excerpted, described and analysed. In their classification, Pennanen’s original typology of six “traditional” types was applied, furthermore supplemented by three other types (Types VII – IX), for which a certain number of items were found in the material collected. I continued using Pennanen’s typology and basic principles, namely for two reasons: firstly, I find this typology and rules concise and universally acceptable and therefore easily applicable to any additional material; secondly, application of a relatively identical approach enables an integration of mine as well as Pennanen’s results into an overall, unified view of the phenomenon and consequently giving a complete picture of the situation over the whole 20<sup>th</sup> century and main tendencies.

As far as the situation in the second half of the 20<sup>th</sup> century is concerned, the highest number of items have been identified for the first decade of the given period, the 1960s, an important influencing factor being probably the firmer settlement of vocabulary of the older date. On the other hand, the decreasing line in the quantity towards the end of the 20<sup>th</sup> century is direct enough, without major fluctuations, which bears evidence of a natural and smooth development of the phenomenon; probably only the “young age” of the newer vocabulary gives the reason for the decreasing quantity. Nevertheless, the established typology works well and the expected categories still appear, having potential for further development. In this connection, it is useful to remind of Pennanen’s comment on the examination of a very recent material at the time of his

research: “One of the most difficult problems when dealing with the 20<sup>th</sup> century material is to keep up with the rapid growth of the language. At a given point of time it is practically impossible to catch all the new coinages and formations in any one category of word-formation. But the categories and types that are operational in word-formation clearly emerge. Thus, although our material representing the present century is not complete, it will prove satisfactory for the purpose of this paper” (1966, p. 91).

Quantitative representation of the types clearly shows their frequency order; Type II (verbs from action nouns) is the most productive, it is followed by Type I (verbs from agent nouns) and Type IV (nouns from adjectives). The quantitative difference between Type II and Type I is considerably high – the results have shown that back-formed verbs are almost typically derived from action nouns. I believe that this is probably so because of already higher number of action nouns than agent nouns among potential source words as starting points of this process. This presumption is based on several findings during the research: often a back-formed verb is semantically defined as “to subject to ...ing” (e.g. *rate-cap*, v. “to subject to rate-capping”, OED4), which clearly invites us to consider the verbal noun as the source even without the dates of their diachronic order. In other cases, in a family of relative derivatives, the sequence of formation is explicitly given in the entry, e.g. OED4: “*queue-jumping* [f. *queue* n. + *jumping* vbl. n.]; pushing forward out of one's turn in a queue; also fig.; Hence (as a BF) *queue-jump* v.; also *queue-jumper*, one who jumps a queue.” In most situations it is, however, the diachronic factor (the dates of first occurrence) that leads us to interpret the order of the items. The action noun comes usually into being earliest of all other forms (present or past participle, or agent noun), so it is more often considered to be the source of the respective BF. On the other hand, sometimes it is not easy to decide if the verb belongs to Type II or I, the preference of the action noun as the source is finally a kind of general tendency.

Compound words form more than a half of the material (55 %), a significant proportion of them being represented by neoclassical ones. Derivatives make up about one fourth; there are fewer monomorphemic items, only 17 %. The most frequent suffix involved in the process is *-ing*, especially because of the large quantity of verbal nouns directly denoting the action. Suffixes *-ion* / *-ation* are also very frequent; of others, *-er* (mainly due to agent nouns) and *-y* (adjectives in Type IV and abstract nouns in Type VI), are noticeable.

Most of the words are stylistically neutral (almost one half); there is a considerable quantity of technical terms and learned words (one third). About one third of the technical terms 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, microcode*) or ecology (*eutrophicate*).

The regionally coloured BFs are usually Americanisms, or words originated in the USA (thirty-one out of thirty-eight). Other varieties involved are Australian, Canadian, South-African and the West-Indies English. Slang words represent only 9 % in the sample; they are predominantly Americanisms.

In the sample from the second half of the 20<sup>th</sup> century, there are some especially interesting items which deserve attention. So, for example, the source agent nouns of the verbs *lase, mase* and *Tase* are acronyms, in which the ending *-er* is not, actually, a real suffix but a couple of initials of the two last words forming the acronym. The verb *yuppify* is based on the action noun (*yuppification*) derived from the acronymous word referring to a kind of person (*Yuppie*, see 8.1.2). Another morphologically interesting word is the adjective *genethic* whose source noun *genethics* was formed as a blend of *genetics* and *ethics*.

Verbs like *car-jack, forthold* or *job-share* represent the minor class of compound verbs where the relation between the constituents is objective. Some items in my material were not explicitly interpreted in the dictionaries as BFs (e.g. *snowboarding, skateboarding*), but other factors were so convincing (e.g. the structure of the words, mutual semantic relation between the relative words and the dates of recording), that it would be wrong not to consider them as the results of BF.

Some back-formed words of the second half of the 20<sup>th</sup> century became part of vocabulary extremely later than their respective source words and finished thus the long-lasting process which had started in the time of Pennanen's investigation, e.g. *microinject* or *predate* (both 1974) from *microinjection* and *predation* (1921, 1932), or *paramedic* (1970) from *paramedical* (1921).

In the sample, there are several items which come from proprietary names of brands, e.g. the verbs *Dolby* and *Tase*, directly connected with the application of these tools or systems; or proper names, e.g. *Finlandize* – this verb has, however, generalized its meaning metaphorically – 'to neutralize a country in terms of its allegiance to the superpowers' – based on similarity of such an act with the real one in history between Finland and the Soviet Union.

A few words appear in the material several times as different parts of speech belonging to different types. Such a word is *skeeve*, as a back-formed verb resulting from an adjective (Type III) and in addition having two meanings which come from different decades, and as a noun (Type IV). Some other polysemous words are the result of BF only in one of their meanings (e.g. *fluidic*, adj., Type VI, OED4: BF and derivation, see 8.1.6).

Prefix BFs and inflectional BFs continue producing new items during the second half of the 20<sup>th</sup> century. Three of the eight prefix BFs are extremely recent: *plore* (1989), *concerting* (2003) and *ilch* (2003). The prevailing relation between the source and resulting word in Type VIII (prefix BFs) is antonymy and the most frequent resulting part of speech is an adjective. The two words in Type IX (inflectional BFs) result from the subtracting of a supposed plural suffix. The style of the words within these types varies from neutral over regional up to technical, different sorts of connotation being distributed fairly equally.

Three BFs (adjectives from agent nouns: *carburetted*, *do-good* and *teeny-bop*) have appeared in the research of the second half of the 20<sup>th</sup> century material, which seem to be different from the rest, and for which, therefore, we have established a new category, referred to as Type VII. It is only the matter of future time if such a category can vindicate its existence.

## 9 THE OVERALL PICTURE OF THE DEVELOPMENT OF BACK-FORMATION IN THE 20<sup>TH</sup> AND THE EARLY 21<sup>ST</sup> CENTURY

After collecting and evaluating all the necessary data, I can now compare the situation in the period for which the process of BF was described and analyzed by Pennanen (1966) and completed by an additional sample and its analysis in the present work (the beginning of the 20th century - 1960) with that of the second half of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century, described and analyzed as the main objective of this research. As a result, the aim is to provide the overall picture of the development of BF at present, to elicit the most typical features and tendencies including mainly:

- the dominant type of BF, i.e. the most frequent part of speech resulting from this word-formation process and the most productive source class(es) yielding it
- the prevailing morphological structure of the new words (especially *composita* vs. *simplicia*)
- the affixes most frequently involved in the subtraction within BF
- the prevailing stylistic and regional connotation of the resulting BFs
- specific features of this process, including description of such types that were not recognized or found by Pennanen but the existence of which cannot be ignored now
- the BFs that arose in the course of the second half of the 20<sup>th</sup> century, while they had been predicted by Pennanen as potential in the future (non-existent in his period yet)

In the present chapter the data regarding each individual period are positioned next to each other for the purpose of their comparison, and the final, integrated results are presented demonstrating the situation over the whole century up to the present time. Altogether, I have collected, described, classified and analyzed 700 back-formations for the whole period of the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> centuries. Table 10 shows the quantitative shares of the two halves of the century and the final numbers regarding all the nine types.

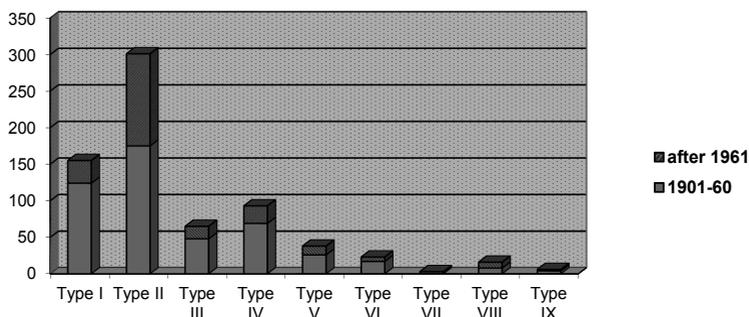
	1901-1960	1961 – the present time	Total
Type I	124	31	155
Type II	175	126	301
Type III	48	17	65
Type IV	69	24	93
Type V	26	12	38
Type VI	17	6	23
Type VII	0	3	3
Type VIII	8	8	16
Type IX	4	2	6
Total	<b>471 / 67 %</b>	<b>229 / 33 %</b>	<b>700</b>

Table 10: Quantitative development of the process of BF over the whole 20<sup>th</sup> century

The number of BFs found in the second period (after 1960) makes up one third of the whole century's material. The difference between the first and the second period is rather big; however this mutual ratio has its reasons. Although I have scrutinized a set of most authoritative updated dictionaries and several other sources providing the most recent vocabulary, the lower number of BFs in the second period is, of course, affected by several factors: firstly, new items of vocabulary generally come to be presented in dictionaries slowly and I suppose that any research done in another forty to fifty years would reveal many more items established for the same period. Secondly, this lower number can also be influenced by the number of sources that have been used in the research; possibly, there might be some items that I have not revealed in other dictionaries. Nevertheless, the research was focused on the best established, authoritative and most comprehensive ones and I doubt that the number of such additionally found items would be significantly high. Thirdly, the period of the "second half" of the 20<sup>th</sup> century in the present research, actually, involves a slightly shorter time span than that of the preceding period – four decades of the 20<sup>th</sup> century and the beginning of the 21<sup>st</sup> century. It is almost impossible to find a greater number of items in the most recent years. Finally, the number of items found for the second period in the present research is practically the same as the number of items found by Pennanen at the time of his research. If we realize that he was in a similar situation as we are now in respect to the most recent period, we have to come to the conclusion that the productivity of BF has actually not decreased. However, the decision about the most recent period in terms of the degree of productivity needs a certain distance to be more objective. In my opinion, it would be much more reliable, for example, to compare the quantity of the first half of the 20<sup>th</sup> century and of the previous period, as the vocabulary formed then has been much more firmly established since that time and there is not much that should change. Therefore,

what the present research can provide is the description, analysis and comparison of the existing facts and indication of possible tendencies in the future.

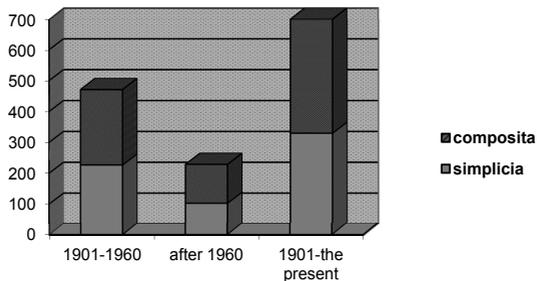
As far as the most productive type of BF at present is concerned, Type II has kept its predominance till the second half of the 20<sup>th</sup> century.



Graph 15: Representation of individual types over the whole century, indicating the shares of the 1<sup>st</sup> and the 2<sup>nd</sup> period

The main tendency that verbs represent the decisive result of this process of word-formation has been maintained. Verbs produced by BF mostly come from action nouns, where the speed of growth is bigger than in any other type, or also from agent nouns, which have slowed down their production since the fifties. While in the first half of the 20<sup>th</sup> century verbs were formed almost equally from action and agent nouns, at present, action nouns markedly outnumber agent nouns and have become an absolutely prevailing source of back-formed verbs. BF of verbs from adjectives has almost become extinct. On the other hand, BF of nouns from adjectives continues (Type IV), representing the third most productive type. There is a significant decrease in BF of adjectives from nouns (Type VI in my modified typology); this trend was already apparent from Pennanen's sample in the first half of the 20<sup>th</sup> century (Pennanen's Type V).

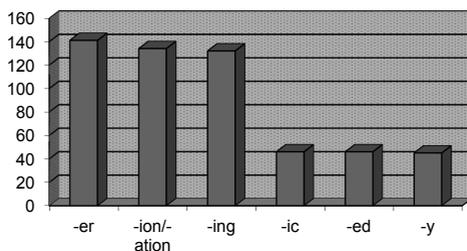
The situation in terms of the morphological structure of resulting BFs has slightly changed, too. In the second period, compared with the first one, we can observe a slight growth in the share of compound words. Composita in the first period form 52 %, while they represent 55 % in the second. So the overall share of compounds during the whole century results in the final 53 % and, in addition, we can speak of the growing tendency.



Graph 16: The proportion of composita and simplicia in the periods of 1901-1960, 1961-the present, and in the whole 20<sup>th</sup> century

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, we can confirm that BF is one of the most important ways in which compound verbs are formed.

The overall final comparison of all the results has shown that the most frequently involved suffixes in the process of BF over the whole century are: *-er*, *-ion /-ation*, *-ing*, *-ic*, *-ed* and *-y*.



Graph 17: The most frequent suffixes in the process of BF over the whole 20<sup>th</sup> century

The first three suffixes take part in the formation of verbs and confirm thus the idea of BF being one of the main sources of new verbs in English. The suffix *-er* was the most frequent suffix subtracted in BF of the first half of the 20<sup>th</sup> century, it was almost exclusively involved in the formation of verbs from agent nouns. Since there has been such an enormous growth of BF's from action nouns during the second half of the century, which has shifted the suffixes *-ing* and

*-ion/-ation* to the first places in frequency in the second period, the overall result for the whole century is that these three suffixes are almost equal in number. The suffix *-ing* is the most growing suffix in productivity: while it represented only 14 % of all suffixes in the first period, it is involved in the subtraction much more now – at present, it makes up one third of all suffixes involved. In our opinion, this is the result of the growth in the number of source compound nouns ending in *-ing* involved in the process of BF (type *break-dancing*, *car-jacking*, etc.). There is a vast gap in quantity between these and the other three suffixes (*-ic*, *-ed* and *-y*), which participate in the formation from adjectives, i.e. in Type IV.

From the point of view of style, two categories seem to be stronger than others – stylistically unmarked words on the one hand, and technical terms and learned words on the other. At the same time, there is a tendency of many words without any special label of belonging to a special field to be rather limited in use and be thus very close to the terminology of that field (e.g. *demerge* in business, *grit-blast* in technology, etc.) or to the learned style, especially those of Latin origin (e.g. *accreditate*, *contracept*, etc.) Among other stylistic connotations, slang and regional (especially American) markedness occurs with some BFs, often overlapping in one and the same unit.

Among the types that are not very numerous, there are three which were not included in Pennanen's analysis but cannot be overlooked despite their small size. The research in the area of BF would not be complete without the description of prefix BFs and inflectional BFs, since they continue arising at present. Sixteen items of Type VIII (prefix BFs) in the material of the whole century, of which a half has been formed recently, prove that this process should not be excluded. The development in the class of inflectional BFs (Type IX) is less active, from four items in the first period to only two items in the 1970s. The third minor class which deserves to be mentioned and examples of which have been discovered only in the material of the second period is referred to as Type VII in my sample - adjectives back-formed from agent nouns (e.g. *do-good* < *do-gooder*). This class might be possibly enriched by further items in the future.

In three cases, the investigation of the material of the 20<sup>th</sup> century has confirmed the movement of language from potential BFs up to their institutionalization and attesting in the dictionaries. Three BFs referred to by Pennanen (1966) as non-existent but potentially possible in the future have been attested: *job-hunt*, *skirt-chase* and *teleprint*. *Job-hunt* (OED4: 1946, “seek employment”) is a stylistically unmarked verb from the action noun *job-hunting*, included in my sample of the first period material. *Skirt-chase* (OED4: 1981, “to pursue women with amorous attentions”) is a very recent slang verb from the agent noun *skirt-chaser*, and *teleprint*

(OED4: 1971, “to send or print (a message, etc.) by teleprinter”) is an unmarked verb back-formed from the instrument noun *teleprinter*.

The study of contemporary material in the field of BF has brought interesting findings about the development of this word-formation process from the beginning of the 20<sup>th</sup> century till the present time. It is not, however, a closed process. As early as now, new BFs potentially exist in the present vocabulary, especially among neologisms. We cannot predict when the new items come into being, but based on the present research, we can claim with certainty that this process is going to continue.

## 10 BACK-FORMATIONS AMONG NEOLOGISMS

### 10.1 Three types of BF neologisms

The material collected for the present research also contains several very recent BFs – neologisms from the most recent decades since the 1980s. Apart from the updated traditional authoritative dictionaries (OED4, Merriam Webster’s and others, see Bibliography), the main sources from which I have excerpted the latest items are the following:

Ayto, J. (1990), *The Longman Register of New Words, Volume Two*. Longman Group Limited.

Rice University, Houston, Texas, Dept of Linguistics (2003)

<http://www.ruf.rice.edu/~kemmer/Words/info.html>.

Birmingham City University, Research and Development Unit for English Studies (2008)

<http://rdues.bcu.ac.uk/neologisms.shtml>

These three sources are in this chapter referred to as “Ayto”, “RUH” and “BCU”, respectively.

When studying neologisms, I have 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 (OED4, MW’s CD, D.com). 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 20<sup>th</sup> century. Words like *dollarize* and others (referred to as “unconfirmed BFs”) are introduced, described and analyzed in the present chapter. Altogether I have found eight 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 20<sup>th</sup> century.

The chapter furthermore deals 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 (or not) 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) have been applied again (Types I – IX), 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 “suspect” suffixes were selected and classified as likely candidates for one of the nine types within the 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”. Each such pair - the existing source word and its potential resulting BF - was then described formally, semantically and stylistically and included in the overall analysis of the whole sample. As a result of this research, I have created, described and analyzed a sample of sixty 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.

Realizing that language is in constant flux (as has been mentioned here several times), I could not content myself with a mere statement of “what *might* happen” and wanted to find out what *is actually happening* now regarding the potential BFs that I had generated. So, the final step in the research of neologisms was to consult a source that is living and absolutely up to date: the Internet. Using the Google search engine I searched for each of the 60 potential items and discovered that twenty-five 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 my hypothesis was proceeding in a correct direction.

To summarize, the present chapter consists of three parts introducing three types of neologisms:

1. Unconfirmed BFs among dictionary neologisms and their classification (8 items)
2. Potential (hypothetical) BFs from neologisms and their analysis (60 items)
3. Google-confirmed hypothetical BFs – those originally potential BFs that have been confirmed as existing on the Internet but not institutionalized yet and thus not recorded in the dictionaries (25 items)

All the three samples are presented in this chapter and not in a separate appendix, since I think that these collections are not as extensive as those of the previously presented material, and that they deserve specific commentaries and analyses.

## **10.2 Unconfirmed BFs among dictionary neologisms and their classification**

### **10.2.1 TYPE I: verb from agent noun**

*blush* < *blusher*

Here the definition of meaning clearly indicates the order of appearance. The verb *blush* has several earlier meanings; this one is new. The date of appearance of the source noun (with the meaning “cosmetic used to give an artificial colour to the face”) is 1965. The word is unmarked, morphologically simple (monomorphemic), the source noun refers to a thing / instrument. A comparable example of the same type found in the material of the second half of the 20<sup>th</sup> century is, e.g. *volumize* < *volumizer* (“to apply a volumizer to hair to increase its volume”).

### **10.2.2 TYPE II: verb from action noun**

*dollarize* < *dollarization*,

*eco-renovate* < *eco-renovation*

*gazunder* < *gazundering* / *gazunderer*

*sandsurf* < *sandsurfing*

The conclusion that *dollarize* is a back-formed verb is based on the fact that the source noun appears in most of the consulted dictionaries (e.g. OED4) without the verb being there at all; or the verb is part of the entry as a derived form, not as a separate entry (MW’s 11<sup>th</sup> CD). The word is morphologically complex and is labelled as a term in economics. A similar example found in the material from the second half of the 20<sup>th</sup> century is, e.g. *decriminalize* < *decriminalization* (“to reclassify an activity so that it is no longer considered criminal in law”) or *Finlandize* < *Finlandization* (see above).

The source noun of the verb *eco-renovate* occurs on many website pages in connection with the “green” way of life, e.g. *Ecorenovation* (*Oxfordshire Climate Exchange*), while the verb was only found in the Birmingham University Project on neologisms, and in the given citation, it was introduced in quotation marks indicating thus a feeling that the item is unusual, new, not established yet. It is a compound having a combining form as its first constituent. It can be taken as stylistically unmarked, but frequently used in the industry of building or architecture. A

similar example found in the material from the second half of the 20th century is, e.g. *photoduplicate* < *photoduplication* (“to duplicate documentary material using a photocopier”).

In the case of *gazunder*, both the source noun(s) and the resulting verb appeared in the same year (the verb a month later). Ayto (1990) implies priority of the noun: “It is mainly encountered as a verbal noun, but there is also some evidence of the use of the word as a finite verb” (p. 150) and illustrates this by an extract from December 1988. An identical order of appearance is also given in OED4 and the words are classified as colloquial. The word is used in the area of house-selling. The closest example found in the material from the second half of the 20<sup>th</sup> century is *downwell* < *downwelling* (of seawater or other fluid: “to sink in a downward current”).

*Sandsurfing* is a recently invented sport. As well as in the case of *eco-innovation*, this source noun occurs in texts on the Internet more frequently than the verb. In addition, the verb is introduced as a very recent neologism (2007) by Birmingham University. It is a compound and a stylistically unmarked item. A comparable item from the second half of the 20<sup>th</sup> century is, e.g. *snowboard* < *snowboarding* (“to participate in snowboarding”).

### 10.2.3 TYPE IV: noun from adjective

*bilat* < *bilateral*

*cat* < *catalytic*

*decaf* < *decaffeinated*

This group is a special example of reduction. All the three words are used as informal equivalents of a neutral phrase or compound, being the result of two processes: ellipsis of the second constituent of the expression (noun), and further shortening of the premodifier (adjective). The latter process can be viewed as BF, since the resulting word is a different part of speech than the reduced adjective. On the other hand, a mere shortening of the whole compound is also admissible because the boundary line between the individual historical morphemes in the source adjective is in a different place: *bilater* / *al* vs. *bilat* / *eral*, *cata* / *lytic* vs. *cat* / *alytic* and *de* / *caffeinated* vs. *decaf* / *feinated*. In addition, the resulting noun is a variant realization of the source compound noun. This process is reminiscent of a similar process in Czech – univerbization without further resuffixation (see Chapter 5.2.8).

These items are partly comparable with, e.g., *methanogen* < *methanogenic* (“methanogenic organism”) or *somatotroph* < *somatotrophic* (“somatotrophic cell”), namely semantically, as the resulting noun is a shorter variant of (and having the same meaning as) a longer premodified noun phrase. On the other hand, formal comparison is not so fortunate, since what is subtracted in the source adjective in both cases is a real suffix, *-ic*.

### 10.3 Potential (hypothetical) BF's from neologisms

The following 60 items are hypothetical BF's inferred on the grounds of the rules and types established in Pennanen's original typology and in the present analysis. The method was applied to existing neologisms to indicate their potential, hypothetical development. The potential resulting words are marked by an asterisk. All the source words are taken from Ayto's *The Longman Register of New Words* (1990).

Each potential BF is supported by an example of a well-established item with a similar grammatical and semantic structure and, if possible, similar style, taken from the material of the 20<sup>th</sup> century. For the needs of this survey, such an existing unit is described as a "mirror word", since the intention is to show the potential back-formed words as possible new items resembling analogically something the existence of which has been proved in the language for some time.

#### 10.3.1 TYPE I: verb from agent / instrument noun

1. **\*blat** < *blatter* (or *blatting*)

- to drive on unsurfaced country roads as a hobby

Mirror word: *spelunk* < *spelunker*; to explore caves, esp. as a hobby; Am. Slang

2. **\*boy-toy** < *boy toyer*

- to have a young male lover

Mirror word: *train-spot* < *train-spotter*; to observe trains and record railway locomotive numbers as a hobby

3. **\*comp** < *comper* (or *comping*)

- to enter competitions regularly

Mirror word: *spelunk* < *spelunker*; to explore caves, esp. as a hobby; Am. Slang

4. **\*conduce** < *conducer*

- to act as a consumer and a producer at the same time

Mirror word: *deal* < *dealer*; to be dealer in something, sell

5. **\*daytime** < *daytimer*

- to go to daytimers (= a disco held in the afternoon for young Asians)

Mirror word: *daysail* < *day sailer*; to go boating in a day sailer

6. **\*dope** < *doper*

- to transport or traffic in illegal drugs

Mirror word: *deal* < *dealer*; to be dealer in something, sell

7. **\*fuzzbust** < *fuzzbuster*

- (of a fuzzbuster) to detect the presence of police radar speed traps

Mirror word: *blow-dry* < *blow-dryer*; to dry and usually style (hair) with a blow-dryer

8. **\*green-lane** < *green laner*

- to drive on unmetalled country roads and trackways and do so as a hobby

Mirror word: *topline* < *topliner*; to appear as the principal performer

9. **\*monkey-wrench** < *monkey wrencher*

- to obstruct or spoil sth.

Mirror word: *jackroll* < *jackroller*; South-African slang: to act as a jackroller

10. **\*pre-lighten** < *pre-lightener*

- to apply the pre-lightener to bleach the hair

Mirror word: *volumize* < *volumizer*; to add volume to, as the hair; to enhance the thickness or body of

**11. \*upski** < *upskier*

- to ski uphill

Mirror word: *freeload* < *freeloader*; to take advantage of others for free food, entertainment

**12. \*wallpeck** < *wallpecker*

to chip pieces off the Berlin Wall

Mirror word: *train-spot* < *train-spotter*; to observe trains and record railway locomotive numbers as a hobby

**13. \*stonepeck** < *stonepecker*

- synonym to *wallpeck*

Mirror word: *train-spot* < *train-spotter*; to observe trains and record railway locomotive numbers as a hobby

Commenting on the noun *blatter* (a source word for a potential verb *blat*), Ayto says: “The element *blat-* seems to be a piece of sound-symbolism, suggestive of the spatters of mud which fly out from under the blatter’s wheels” (1990, p.38). The potential verb would have nothing in common with *to blat* (v., U.S., OED4) meaning *to bleat*.

The verb *comp* has several meanings; the meaning of the potential new item (“to enter competitions regularly”) is bound to be different. None of already existing meanings is related to the agent / action noun *comper* / *compering* (e.g. “to compose”, “to provide with a computer”, “to provide free of charge”, “to play an accompaniment (to)”, etc.).

Similarly, the verb *conduce* has three meanings (1 “to conduct, guide, bring”; 2 “to bring about, effect”; 3 intr. verb: “to lead or tend especially with reference to a desirable result, used with *to* or *toward*”), but these meanings are different from that underlying the potential new back-formed verb (“to act as a consumer and producer”); in addition, the first two senses are obsolete.

As far as the verb *daytime* is concerned, the source word formally looks like an agent noun / instrument, while semantically it can be felt as close to Type II (action noun). However, neither of these classifications seems to be completely satisfying. The word refers to an event and reflects its temporal circumstance. On the other hand, the form of the word, based on our rules, allows us to conjecture the hypothetical back-formed verb and classify it as belonging to Type I.

The verb *dope* exists in both British and American English, with slightly different meanings. The meaning associated with BF appears to be a new development (Ayto, 1990).

When interpreting the nouns *wallpecker* and *stonepecker*, Ayto suggests: “The word is an adaptation of the German neologism *Mauerspecht*, which means literally ‘wall-woodpecker’. *Woodpecker* has been used in English in the same sense ...The synonym *stonepecker* was used on the BBC” (1990, p. 341).

The group contains thirteen potential verbs, of which ten are based on the source word referring to a person (agent) and three to an inanimate object (instrument), which is, actually, the opposite relation to that found in the same group from the second half of the 20<sup>th</sup> century.

The resulting potential back-formed verbs equally represent both *composita* and *simplicia*; there are four monomorphemic verbs, which is one third.

All the source words have the typical suffix *-er*.

A considerable number of potential verbs are regionally coloured; however, almost the same number of them is neutral. Two of the slang verbs (*fuzzbust*, *monkey-wrench*) are Americanisms. There is no technical term among them, which is close to the situation in the same category from the second half of the 20<sup>th</sup> century, where there are three technical terms out of fifteen items.

### 10.3.2 TYPE II: verb from action noun

#### 1. \*backyard < *backyardism*

- (of a small country) to be under influence of a large economically powerful country

Mirror word: *one-up* < *one-upmanship*; to keep one jump ahead of a friend or competitor

#### 2. \*casual < *casualism*

- to employ casual labour

Mirror word: *one-up* < *one-upmanship*; to keep one jump ahead of a friend or competitor

#### 3. \*cocoon < *cocooning*

- to live a safe, unadventurous, home-based life

Mirror word: *upkeep* < *upkeeping*; to keep up, in various senses; esp. to maintain in good order

#### 4. \*cold-fax < *cold-faxing*

- to send unsolicited material by fax

Mirror word: *soft-land* < *soft-landing*; to land slowly without serious damage, esp. on another planet or a satellite

#### 5. \*destatize / destatise < *destatization / destatisation*

- (of the state) to withdraw from large areas of the economy that were hitherto state-controlled

Mirror word: *Finlandize* < *Finlandization*; to neutralize a country in terms of its allegiance to the superpowers

#### 6. \*Disneyfy < *Disneyfication*

- to implement Disneyfication (= trivializing commercialization, involving the transformation of genuine events, places of true historical interest, etc. into quaint pastiches)

Mirror word: *biomagnify* < *biomagnification*; to undergo biological magnification

#### 7. \*downmarket < *downmarketing*

- to conduct advertising strategy aimed at lower socioeconomic groups

Mirror word: *upkeep* < *upkeeping*; to keep up, in various senses; esp. to maintain in good order

#### 8. \*eco-label < *eco-labelling*

- to do the eco-labelling (= the labelling of products with a certification that they have been manufactured or produced in a way that does not harm the environment)

Mirror word: *fine-tune* < *fine tuning*; orig. U.S.: to adjust (an instrument, measurement, etc.) very precisely

#### 9. \*fax-nap < *fax-napping*

- to steal someone's Filofax or similar personal organizer in order to demand money for its return

Mirror word: *house-clean* < *house-cleaning*; to clean a house

**10. \*filo-nap** < *filo-napping*

A synonym to the previous unit

**11. \*flash-forward** < *flash-forwarding*

- to do the flash-forwarding (= the making of brief transitions in a novel, film, etc. to a later event, quickly returning to the chronological sequence of the narrative)

Mirror word: *ice-fish* < *ice-fishing*; to fish in winter through holes made in the ice

**12. \*gas-flush** < *gas-flushing*

- to use to method of gas-flushing (= food preservation in which the food item is precooked in a vacuum-sealed bag)

Mirror word: *ice-fish* < *ice-fishing*; to fish in winter through holes made in the ice

**13. \*goldfish** < *goldfishing*

- to illustrate a television news commentary on parliamentary proceedings with silent footage of MPs speaking in the chamber

Mirror word: *loud-hail* < *loud-hailing*; to speak or call through a loud-hailer; also figurative

**14. \*green-label** < *green-labelling*

Synonym to *eco-label*

**15. \*grockle** < *grockling* (noun)

to visit places of interest as a tourist

Mirror word: *keeper* < *keeping*; to look after as a gamekeeper

**16. \*infotain** < *infotainment*

-to present information in an entertaining way

Mirror word: *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

**17. \*joy-fire** < *joy-firing*

- to fire guns to celebrate sth.

Mirror word: *show-jump* < *show-jumping*; to compete in show-jumping

**18. \*lightweight** < *lightweighting*

- to use light materials for packaging

Mirror word: *fine-tune* < *fine tuning*; orig. U.S.: to adjust (an instrument, measurement, etc.) very precisely

**19. \*marketize** < *marketization*

- to transform an economy into a free-market economy

Mirror word: *divisionalize* < *divisionalization*; to organize (a company, etc.) on a divisional basis

**20. \*monoboard** < *monoboarding*

- to ski downhill on a single large ski

Mirror word: *snowboard* < *snowboarding*; to ride a snowboard, to participate in snowboarding

**21. \*parapent(e)** < *parapenting*

- to jump from a high place (e.g. a hilltop) with a special parachute

Mirror word: *safekeep* > *safekeeping*; to keep safe, protect

**22. \*slice-colour** < *slice colouring*

- to apply a thin line of colouring to the tips of the hairs

Mirror word: *fine-tune* < *fine tuning*; orig. U.S.: to adjust (an instrument, measurement, etc.) very precisely

**23. \*snowsurf** < *snowsurling*

- to participate in snowsurfing (= the sport of skiing downhill standing sideways on a single large ski, controlling its direction with the feet and with body movements)

Mirror word: *snowboard* < *snowboarding*; to ride a snowboard, to participate in snowboarding

**24. \*spas** < *spasing*

– to sell goods door-to-door pretending to have a speech defect or other disability in order to gain the customers' sympathy

Mirror word: *pend* < *pending*; to treat (an issue, etc.) as pending; to postpone deciding or attending to, defer

**25. \*step-parent** < *step-parenting*

– to look after a child in the capacity of a step-parent

Mirror word: *scapegoat* < *scapegoating*; to make a scapegoat of (someone); to subject to scapegoating

**26. \*tariffy** < *tariffication*

- to convert (e.g. EC import restrictions) into a tariff

Mirror word: *biomagnify* < *biomagnification*; to undergo biological magnification

**27. \*tax** < *taxing*

– to mug a person in order to steal his or her fashionable footwear

Mirror word: *pend* < *pending*; to treat (an issue, etc.) as pending; to postpone deciding or attending to, defer

**28. \*videowipe** < *videoswiping*

– to extract images from films and videotapes and use them to compose a hologram

Mirror word: *fine-tune* < *fine tuning*; orig. U.S.: to adjust (an instrument, measurement, etc.) very precisely

**29. \*Vogue** < *Voguing / Vogueing*

- to dance in a style of Voguing (= the style of dancing to house music which incorporates movements and gestures of models displaying clothes)

Mirror word: *politick* < *politicking*; to engage in often partisan political discussion or activity

**30. \*water-walk** < *water-walking*

– to walk in water in terms of water aerobics

Mirror word: *snowboard* < *snowboarding*; to ride a snowboard, to participate in snowboarding

The present sense of *casualism* is new; the noun was used in the 19<sup>th</sup> century to mean “the situation where mere chance prevails”, i.e. with a more general meaning.

The verb *cocoon* itself is not new, but the presupposed potential item would derive a new meaning from its source noun. The existent meanings are both neutral and transferred: intransitive – “to produce a cocoon”; transitive – “to wrap or enclose tightly, as if in a cocoon” (*The doctor cocooned the patient in blankets.*), “to provide” (machinery, guns, etc.) with a protective, airtight covering by spraying with polyvinyl chloride or the like and to envelop or surround protectively; “insulate” (*political leader cocooned by his staff and his bodyguards.*)

*Cold-faxing* was inspired by the same metaphorical use of *cold* for “suddenly” as in *cold-calling*, making unsolicited visits or phone-calls in order to sell something (Ayto, 1990, p.71).

*Goldfishing* is a metaphor as well. Ayto comments on this word in the following way: “It is a metaphor based on the notion of a goldfish swimming round and round in a bowl, silently opening and shutting its mouth” (1990, p. 157).

As far as the noun *grockle* (the basis for the noun *grockling*) is concerned, OED4 presents it as a slang word and Ayto adds: “The noun *grockle* ‘tourist’ (usually in a derogatory sense) has

been around since at least the early 1960s.... and now comes its transformation into a gerund. The agent noun *grockler* has also been recorded” (1990, p. 166).

The potential verb *Vogue* is also supported by both action and agent noun. Ayto explains: “*Voguing* originated in the black and Latin gay youth culture of the USA. It takes its name from the fashion magazine *Vogue*, which abounds with pictures of models whose performance on the catwalk is aped in the dance. A participant is called a *voguer*” (1990, p. 340).

This group is, as usual and as expected, the richest one – it contains 30 items. To venture a hypothesis about potential BFs here has been much easier than with any other type, especially because of the suffix *-ing*, typical of verbal noun, which directly invites the appearance of a verb. As a result, this suffix has led to the highest number of suggested items.

Compounds form two thirds of the resulting verbs; there are only five monomorphemic items.

As regards the meaning of the source nouns, the overwhelming majority are action nouns; only two, *backyardism* and *casualism*, are very close to the meaning of state or quality of a process, which is reflected in their suffix: *-ism* is not a usual suffix of action nouns, it is more common with abstract nouns in Types V and VI.

Most of the items are stylistically and regionally unmarked; there are two Americanisms by origin, two slang words and four technical terms, which, unlike in the previous periods, are part of the vocabulary of humanities and commerce rather than natural sciences.

### 10.3.3 TYPE III: verb from adjective

#### 1. \*bladder < bladdered

- to get drunk

Mirror word: *sozzle* < *sozzled*; slang: to imbibe intoxicating drink

#### 2. \*expense < expensed

- to pay all expenses for someone (e.g. an employee)

Mirror word: *cairn* < *cairned*; to mark with a cairn

#### 3. \*man-train < man-trained

- to train a dog to attack a human being when commanded to do so

Mirror word: *obedience-train* < *obedience-trained*; to train a dog to be obedient

#### 4. \*Pont (v) < Ponting

- to leak secrets from a government department to the press

Mirror word: *gangle* > *gangling*; slang: to walk or move with or as if with a loose-jointed gait: move like a gangling person

Of the items found for Type III, the source word *Ponting* has the most interesting history (Ayto 1990, p. 249): “In 1984 Clive Ponting, a senior civil servant at the Ministry of Defence, leaked secret information to Tam Dalyell MP about the sinking of the Argentinean cruiser

*General Belgrano* in 1982. He was later acquitted. It is a happy accident that his name converts so readily into an English present participle or verbal noun”.

The group is very small, similarly as in the second part of the 20<sup>th</sup> century. It was not very numerous in the first period either; it belonged to the smallest groups there, as well. Most often the source words refer to the result of an action; correspondingly they have the typical suffix *-ed*. *Ponting* is a present participle (converted from the proper noun).

Two items are stylistically and regionally unmarked; *bladder* is a potential slang word and *Pont* is a potential term used in politics. Most of the items are monomorphemic, *man-train* is a potential compound verb.

#### 10.3.4 TYPE IV: noun from adjective

Surprisingly, no potential BFs of this category have been found among neologisms. In contrast to this situation, Type IV was the second biggest category in the first half and third in the second half of the 20<sup>th</sup> century. It seems that this type is characterized by a decreasing tendency.

One of the possible reasons can be a lack of adjectives among neologisms; nouns absolutely prevail. Secondly, if there occurs an adjective which has the required form to be considered as a possible candidate (e.g. *bibliophagic*), it turns out that there is already an existing “rival” word in the lexicon which is sufficient enough to fulfil the respective communicative need (*bibliophagist*). The potential back-formed noun (*\*bibliophag*) based on analogy with similar pairs (e.g. *mesotroph* < *mesotrophic*, *telephotograph* < *telephotographic*) has then no chance for the future.

#### 10.3.5 TYPE V: noun from another noun which is believed to be its derivative

**1. \*collectomane** < *collectomania*

– a person who cannot resist collecting or accumulating things

Mirror word: *mythomane* < *mythomania*; a person with a strong or irresistible propensity for fantasizing, lying, or exaggerating

**2. \*cross-owner** < *cross-ownership*

- a person who owns a controlling interest in a newspaper and a broadcasting station

Mirror word: *grantsman* < *grantsmanship*; a specialist in grantsmanship (skill in securing grants, as for research, from federal agencies, foundations, or the like; Americanism)

**3. \*girocrat** < *girocracy*

- a person who is dependent on social-security payments

Mirror word: *telepath* < *telepathy*; one who believes in telepathy

**4. \*Gorbymane** < *Gorbymania*

– a person who is extremely enthusiastic about President Mikhail Gorbachev of the USSR

Mirror word: *mythomane* < *mythomania*; a person with a strong or irresistible propensity for fantasizing, lying, or exaggerating

**5. \*radiophobe** < *radiophobia*

– a person who suffers from irrational fear of radioactivity

Mirror word: *claustrophobe* < *claustrophobia*; one having claustrophobia

**6. \*videocrat** < *videocracy*

- a member of a government that operates mainly or characteristically via television

Mirror word: *telepath* < *telepathy*; one who believes in telepathy

There are two potential BFs ending in the suffix *-mane* referring to a person with particular enthusiasm for something / somebody (e.g. collecting things, President Gorbachev) and supported by an existing item, *mythomane* (1950-55). Ayto (1990), however comments on this type as follows: “The words of this formation have never become entirely naturalized in English, the meaning being preferably expressed by formations in *-maniac*”.

*Cross-ownership* potentially yields an agent noun *\*crossowner*, which further invites the emergence of another hypothetical form, the verb *\*cross-own*, analogically based on Type I (as in, e.g. *overachieve* < *overachiever* (1950-55).

The source word *Gorbymania* and its potential back-formed noun *Gorbymane* occupy a special place in the material. They can be now considered as historical words used only with reference to the period of the 1980s-1990s; even then the use was specifically marked, as Ayto (1990, p. 159) explains: “Gorbymania is now strictly an external phenomenon. When President Gorbachev visits foreign capitals crowds follow him around, hoping for a glimpse, or even a handshake. At home in the Soviet Union, however, his popularity was decidedly on the wane by the end of the 1980s”.

This category contains six potential back-formed nouns, all of them except one referring to people with a specific state of mind (*mania* / *phobia*) or belonging to a certain class (*-cracy*). *Cross-owner* refers to a person of a particular status. The suffixes involved correspond with the semantic content: *-ia* for manias and phobias, *-y* for the collectives of people, and *-ship* for a state. *Girocrat* is a Briticism, the other items are unmarked. All items are compounds, most of them containing a formative referring to a particular class of meanings.

### 10.3.6 TYPE VI: adjective from abstract noun

**1. \*biodiverse** < *biodiversity*

- (of an area) to contain a large number of distinct biological species, to be marked by biodiversity

Mirror word: *superconductive* < *superconductivity*; possessing no electrical resistivity; employing a substance in this state; physics

**2 \*disfluent / dysfluent** < *disfluency / dysfluency*

– characterized by a lack of fluency in speech

Mirror word: *complicit* < *complicity*; having complicity

This category also belongs to the least numerous ones in my research: only twenty-two items have been found for the whole 20<sup>th</sup> century. Pennanen himself does not introduce a single word of this type for the first half of the century.

The two potential back-formed adjectives based on neologisms, are morphologically complex; one is a neoclassical compound, the other a prefixed word. Both tend to be limited in use to a learned field (biology and medicine, respectively). The suffixes potentially subtracted here (*-ity*, *-y*) are almost identical and belong to the most frequent suffixes involved in this process in general.

### 10.3.7 TYPE VII: adjective from agent noun

**1. \*cruciverbal** < *cruciverbalist*

– related to crosswords, e.g. cruciverbal arrangement, style (*cruciverbalist* = someone who does crossword puzzles)

Mirror word: *do-good* < *do-gooder* (a naive and often ineffectual social or political reformer); of or befitting a do-gooder

Type VII is a newly identified category as a result of the present research.

The unit investigated is an affixed compound containing a combining form *cruci-* (“cross”). Ayto listed the source word *cruciverbalist* in his Longman Register of New Words in 1990, commenting on it as follows: “This word may well have existed on the fringes of the language for some years, but it has not achieved recognition by dictionaries. It is based on Latin *crux* “cross” and *verbum* “word” (p. 87). In 2006, however, the word was introduced in OED4, eliminating thus Ayto’s previous statement. The quotation of 1971 presents the noun yet in inverted commas, indicating so its newness and unusualness, but since the 1975 quotation further on, the word has been accepted as neutral.

The potential adjective is supported by the existing item *do-good* < *do-gooder*, where the agent suffix was subtracted, similarly as it is suggested here.

### 10.3.8 TYPE VIII: prefix BFs

1. **\*customed** adj. < *un-customed* adj.

– (of goods) having had the customs duty paid

Mirror word: *flappable* (informal: easily upset or confused, esp. under stress) < *unflappable* (not easily upset or confused, esp. in a crisis)

2. **\*scoopy** adj. < *unscoopy* adj.

– (of mass media) rich in exclusive news stories

Mirror word: *flappable* < *unflappable* (see previous)

This type contains only two potential BFs, both being adjectives based on the relation of antonymy, expressed by the prefix *un-*. Their source words are marked: *un-customed* comes from the West Indies and *unscoopy* is informal.

The “positive” adjective *customed* would probably occur in close neighbourhood with its negative counterpart, in reaction to it. Otherwise the form “customed” is fairly frequent on the web but apparently only as a synonym of “custom-built”.

### 10.3.9 TYPE IX: inflectional BFs

1. **\*politrick** n. < *politricks*

- an individual action within the practice of politricks (= political sharp practice, chicanery, or intimidation, especially during an election campaign)

Mirror word: *bicep* < *biceps* pl. n.; a muscle having two heads; a muscle of the front of the upper arm

2. **\*sweat** n. < *sweats*

- an individual item of a tracksuit, part of a tracksuit

Mirror word: *bicep* < *biceps* pl. n. (see previous)

Both the source words of the potential inflectional BFs are plural nouns and both are regionally marked: *politricks* is Jamaican, *sweats* American. *Politricks* is an abstract noun referring to a practice in politics, *sweats* is a concrete noun referring to clothing. The latter is described as “a cut-down version of *sweatsuit*, an American English term for a tracksuit” by Ayto (1990, p. 313). My hypothesized BFs are based on the assumption that even if the final *-s* is probably the residue of the original second element of the compound *sweatsuit*, some speakers still might wrongly identify it as the plural *-s* and subtract it in order to get the singular.

### 10.3.10 Summary

In this part, 60 potentially back-formed words have been suggested and analyzed. The analysis has shown that Type II is the most numerous group of potential BFs. This result was expected; on the other hand, what was not expected was the lack of potential items of Type IV, which otherwise forms one of the biggest groups. Relative sizes of the other groups more or less correspond with the results for actual BFs during the 20<sup>th</sup> century. One item has been suggested for the newly added Type VII.

The situation here is rather similar to that in the whole of the 20<sup>th</sup> century. Potential compounds of any type prevail – they make up 61%. There are fewer affixed words, but a relatively high share of morphologically simple items. The biggest difference is in the low number of potential derivatives and the high proportion of actual ones in the material from the second half of the 20<sup>th</sup> century.

Representation of individual suffixes involved in the process of possible BF from neologisms has confirmed the existing situation. Suffixes that occur most frequently are more or less the same as in the actual items of the 20<sup>th</sup> century. One of the noticeable differences here is the low frequency of *-ation* for action nouns producing potential back-formed verbs (in the material of the 20<sup>th</sup> century in the second place). Suffixes described as “other” are: *-ist*, *-ity*, *-ment* and *-ship*.

The fact that unmarked items form over one half of the material and that technical terms represent only 13% is a logical result of the research in this area: the sources of neologisms from which the potential back-formed items were extracted involve mainly general language and do not contain many words of specific meaning. In order to elicit more potential items belonging to special scientific fields, I would have to examine dedicated collections of neologisms. This poses a challenge for further possible research on BF.

The number of regionally marked items is not insignificant, and the choice of regions is quite diverse: among the potential BFs are American, British, Jamaican and West Indies items; another two refer to German history and one item is related to the former Soviet Union.

The results of testing the hypothesis about potential new back-formed words from neologisms may have been influenced by certain circumstances, e.g. a limited extent of sources of neologisms, a lack of neologisms of specific (e.g. scientific) meaning and the focus on stylistically neutral and semantically general material, or circumspection and caution in making decisions about morphologically “suspect” items. The resulting sample of hypothetical BFs is likely to contain items which may strike a native speaker as unusual, unnatural, or even bizarre and functionless. On the other hand, it includes items which are not so implausible and it is only

a matter of time when they come into being and become part of existing vocabulary. Many of the now confirmed back-formed words started their “life” like this; they were considered unacceptable and sometimes even ridiculous in the beginning, but later they lost their “strangeness” and merged with the general vocabulary. A typical “classical” example of such reevaluation described in the literature is the word *burgle* < *burglar*. This also applies to many BFs that have been found and analysed in the present work for the period of the 20<sup>th</sup> century: we can observe such development when studying quotations of the occurrence of the words under various dates in dictionaries. At first, the word appears in the text with certain tentativeness, which is indicated by inverted commas, while in quotations of later dates the inverted commas disappear and the word is normally integrated in the text with no special markedness.

The idea of attempting “prediction” of potential BFs is supported by several examples of back-formed words in my material from the 20<sup>th</sup> century, which Pennanen described as non-existent but highly potential at the time of his research. Since then these words have been introduced in dictionaries as actual BFs: *job-hunt* < *job-hunting* (1946), *teleprint* < *teleprinter* (1971) and *skirt-chase* < *skirt-chaser* (1981) (cf. Chapter 4).

#### **10.4 Google-confirmed hypothetical BFs**

The following list contains 25 words which were singled out in the present work as hypothetical BFs (in the sample of 60 suggested ones) and then, in the following stage of the research, found to be existing in contemporary language. They have not been listed in dictionaries yet, which is the reason why they are not introduced in the dictionary of neologisms; however, since they occur on various Internet pages, and are actively used by various speakers, it would be unreasonable to ignore them completely. They will probably be felt to be colloquial, slangy or unusual, and presumably some of them have been used only as nonce words. Whether these words will be generally accepted and then included in dictionaries is a matter of time. At this moment, it is at least interesting to know about them, as they are indeed a little further on their way to institutionalization than purely hypothetical items.

#### 10.4.1 TYPE I: verb from agent / instrument noun

##### 1. **blat** < blatter (or blating)

[www.urbandictionary.com/define.php?term=blating](http://www.urbandictionary.com/define.php?term=blating); accessed on 28.03.2011:

*'to blat: to travel (either by car, bike or foot) in a reckless and erratic manner, often at excessive speeds with little care for your own health or safety, due to extreme levels of eccentricity and genius.'*

##### 2. **green-lane** < green laner

[www.kent4x4offroading.co.uk/green\\_laning\\_debate.htm](http://www.kent4x4offroading.co.uk/green_laning_debate.htm); accessed on 28.03.11:

*'I regularly attend track days at various courses around the country, and have been **green laning** quite a few times in the past years.'*

##### 3. **monkey-wrench** < monkey wrencher

[www.urbandictionary.com/define.php?term=monkey-wrench&page=4](http://www.urbandictionary.com/define.php?term=monkey-wrench&page=4); accessed on 28.03.11:

*I was planning on working on that new project, but then my boss stopped by and **monkey wrenched** my afternoon.'*

##### 4. **pre-lighten** < pre-lightener

[www.funadvice.com/q/do\\_i\\_have\\_to\\_pre\\_lighten\\_my\\_dyed](http://www.funadvice.com/q/do_i_have_to_pre_lighten_my_dyed); accessed on 28.03.11:

*'Do I have to **pre-lighten** my dyed black hair??'*

#### 10.4.2 TYPE II: verb from action noun

##### 1. **cold-fax** < cold-faxing

<http://answers.yahoo.com/question/index?qid=20071221045821AARqw1Q>;

accessed on 28.03.11:

*'It is illegal to **cold fax** to any phone number...'*

##### 2. **cross-own** < cross-ownership

[http://www.grant-](http://www.grant-thornton.co.uk/thinking/elevate/index.php/elevate_templates/article/the_north_goes_mad_for_d)

[thornton.co.uk/thinking/elevate/index.php/elevate\\_templates/article/the\\_north\\_goes\\_mad\\_for\\_d](http://www.grant-thornton.co.uk/thinking/elevate/index.php/elevate_templates/article/the_north_goes_mad_for_d)  
[ecentralised\\_media/](http://www.grant-thornton.co.uk/thinking/elevate/index.php/elevate_templates/article/the_north_goes_mad_for_d); accessed on 29.03.11:

*'The North-East is also where the government itself is focusing its English experiment on TV news (in which we're one bidding company, among many) and there is another in Scotland. Meanwhile, the Tories are looking at city stations, as well as 'big bang' deregulation to empower firms to **cross-own** radio, TV, print and online.'*

##### 3. **Disneyfy** < Disneyfication

[http://news.bbc.co.uk/2/hi/uk\\_news/magazine/6559197.stm](http://news.bbc.co.uk/2/hi/uk_news/magazine/6559197.stm); accessed on 28.03.11:

*'A Charles Dickens theme park opens in Kent soon, promising an authentic taste of the novelist's Victorian world. But is it wrong to "**Disney-fy**" the nation's greatest author?'*

##### 4. **downmarket** < downmarketing

<http://usj.sagepub.com/content/43/7/1025.abstract>; accessed on 29.03.11:

*These findings underscore the urgent need to improve savings instruments for slum-dwellers and to **downmarket** housing finance to reach the poorest residents of rapidly growing cities in developing countries.*

##### 5. **eco-label** < eco-labelling

<http://www.skyscanner.net/news/articles/2008/02/000147-ecolabelling-debate-divides-aviation-industry.html>; accessed on 28.03.11:

*Regional carrier Flybe has already chosen to **eco-label** its flights, informing passengers of the CO2 impact of their journey, but despite parliamentary backing for the scheme, concerns have been raised in several quarters.*

**6. gas-flush** < gas-flushing

<http://www.cherryvalley.co.uk/3rd-party-manufacturers/3rd-party-manufacturers-products>; accessed on 28.03.11:

'We are also able to **gas-flush** fresh product to extend the total life of the product, if required.'

**7. infotain** < infotainment

<http://itbriefing.net/modules.php?op=modload&name=News&file=article&sid=146223>;

accessed on 28.03.11:

'We created the platform to **infotain** local audiences and the businesses that service them. Our partnership with Transit TV provides us with a great opportunity to serve a unique local audience.'

**8. marketize** < marketization

<http://journals.cambridge.org/action/displayAbstract?jsessionid=FAA6A4503A07565AD031D1E7BDEB71F3.tomcat1?fromPage=online&aid=3567556>; accessed on 28.03.11:

'Most analysts would agree that the non-grain agricultural and consumer goods sectors have been fully **marketized**, and quite successfully so, but that the economic reform of the state industrial sector has lagged far behind.'

**9. parapent** < parapenting

<http://www.snowfinders.co.uk/resort-details.aspx?productid=169698>; accessed on 28.03.11:

'There is bowling in Belle Plagne, a swimming pool in Bellecote and the ice grotto up at the glacier is well worth a visit. For the more adventurous there is the chance to **parapent** off the mountains or even try the Olympic bob-sleigh run.'

**10. snowsurf** < snowsurfing

[http://www.988.com/node/books/outdoors-and-nature/snowboarding/45745\\_2.html](http://www.988.com/node/books/outdoors-and-nature/snowboarding/45745_2.html); accessed on 29.03.11:

'This book is going to make an incredible movie! "Snowboarding to Nirvana" traces the athletic feats, romantic encounters and magical Buddhist experiences of a young American as he travels to the Himalayas with a backpack and two snowboards to **snowsurf** the highest and most majestic mountains in the world.'

**11. tariffy** < tariffication

<http://www.neerajkalra.com/iitrade/kmarticle.asp?id=69>; accessed on 29.03.11:

'Countries could elect to **tariffy** or to declare a general ceiling for tariffs across all their imports –but not both. It was mainly developed countries that **tariffied** and thereby gained the right to use the SSG.'

**12. Vogue** < Voguing / Vogueing

<http://www.forteanimes.com/forum/viewtopic.php?p=579678&sid=8fa6c274f1091ac020a1af2164d06a6b>; accessed on 29.03.11:

'He has dreadlocks too and swings them around as he **vogues**. Yes, he actually **vogues** all day long. Everyone has seen him and he sometimes dances down the main shopping street here in mid-winter, topless as usual even though it can be as low as -20 degrees celcius.'

**13. water-walk** < water-walking

<http://www.diagolo.com/swimming-pools/water-aerobics-routines>; accessed on 29.03.11:

'There are fitness centers that offer classes that are solely water walking. These are great for people that need an exercise that is easy on the joints. Many people that have arthritis **water walk** as their way of keeping physically fit.'

#### 10.4.3 TYPE V: noun from another noun which is believed to be its derivative

1. **girocrat** < *girocracy*

<http://www.arrse.co.uk/current-affairs-news-analysis/134230-amalgamated-post-election-thread-20.html>; accessed on 29.03.11:

*'Exactly Toynbee's point - and if you are in the Girocracy, or employed by the Bureaucracy, your self-interest will drive you to the soft Left left rather than (any variety of) Right: on Thurs that meant the **Girocrats**/Bureaucrats unhappy with Broon voted not for Cameron, but for Clegg.'*

2. **radiophobe** < *radiophobia*

<http://www.spectator.co.uk/rodliddle/6776253/nuclear-alert.thtml>; accessed on 29.03.11:

*'I think this gives the lie to the idea I am a **radiophobe**. The point is that if a tsunami or terrorist were to disrupt a cold fusion process, there would be no release of radioactivity.'*

3. **videocrat** < *videocracy*

<http://newleftreview.org/?view=2676>; accessed on 29.03.11:

*'Inside each of us there lies a calligraphic East, a printed Europe, a widescreen America; and the continents negotiate within us without losing their respective place. Each one of us is, simultaneously, God, Reason and Emotion; theocrat, ideocrat, **videocrat**; saint, hero and star. We dream of ourselves as standing outside time; we think about our century; we wonder what to do with our evening.'*

#### 10.4.4 TYPE VI: adjective from abstract noun

1. **biodiverse** < *biodiversity*

<http://www.kentlandscapestudio.co.uk/garden-design-kent/biodiverse-planting/>; accessed on 29.03.11:

*'**Biodiverse** planting basically means increasing the varieties of insects, birds and animals in a particular area by choosing the right plants.'*

2. **disfluent** / **dysfluent** < *disfluency* / *dysfluency*

<http://www.mendeley.com/research/how-listeners-infer-the-causes-of-disfluent-speech/>; accessed on 29.03.11:

*They were told that one speaker had a speech problem to investigate whether this affected their ratings. **Disfluent** answers were judged as less confident and less likely to be correct than definite answers.*

#### 10.4.5 TYPE VII: adjective from agent noun

1. **cruciverbal** < *cruciverbalist*

[http://myweb.tiscali.co.uk/polymetis/puzzles/xwords\\_index.html](http://myweb.tiscali.co.uk/polymetis/puzzles/xwords_index.html); accessed on 29.03.11:

*Also, some have a few answers that comprise several words and yet that are not actually well-known phrases, which makes them both non-standard in **cruciverbal** terms, and a bit harder to solve. I try not to do that any more, in puzzles that I set nowadays; still, you should be able to work out the answers from the clues with a bit of thought.*

#### 10.4.6 TYPE VIII: prefix BFs

##### 1. **customed** adj. < *un-customed* adj.

<http://www.british-history.ac.uk/report.aspx?compid=70711>; accessed on 29.03.11:

*The Trots acquiesced and seemed convinced of their error, but underhand sent to several parts of the West Indies to seize all vessels not cleared by Samuel Trott, whether **customed** goods were on board or not.*

#### 10.4.7 TYPE IX: inflectional BFs

##### 1. **politrick** n. < *politricks*

<http://www.urban75.net/vbulletin/archive/index.php/t-199668.html>; accessed on 29.03.11:

*'About three weeks later the invasion happened and there was another demonstration and it was virtually impossible to find any politicians willing to speak. They were all coming out with the rap, "oh, I'd really love to speak, but I have so much constituency work to do, maybe another time". Do we suspect a **politrick**? Fortunately, we did have Llantwit on hand to preach the duty of civil disobedience.'*

#### 10.4.8 Commentary

Out of the 60 suggested potential BFs, 25 words were found to have been actually formed by English speakers and used in informal Internet communication. This proportion (42 %) is large enough to confirm that the typological system and comparative method that have been used in the prediction of new items work well and are applicable to any kind of relevant material.

Traditionally, verbs from action nouns (Type II) include a large number of BFs. Another interesting fact is that in the smallest classes (Type VI, adjectives from abstract nouns, and Type VII, adjectives from agent nouns) everything that was suggested has been confirmed, even if these classes have low numbers of items. Also in other minor classes (Types V, nouns from other nouns, VIII, prefix BFs and IX, inflectional BFs) at least a few items have been confirmed. The only class for which I have not found any of the potential words to have been actually used is type III (verbs from adjectives). Type IV was not covered in this part of research at all as no potential items were found. Based on the morphological structure of the confirmed back-formed items (eighteen compounds out of twenty-five words), it is possible to say that compounds are generally very popular as a means of condensed expression in informal communication.

This final step in the study of neologisms contributing to the process of BF forcibly illustrates the cycle of BF in language: from the nonce use of a word (ad hoc, tentative, jocular or ironic use for humorous purposes, presented in inverted commas in the quotations in dictionaries), its acceptance and re-use by more than one speaker in informal contexts (public

informal conversation, e.g. on the Internet), up to its institutionalization – the acceptance of the word into the norm of the language and its inclusion in a dictionary (i.e., incorporating the BF in a dictionary as entry word or subentry and thus presenting it as a unit of vocabulary of the given language).

As regards the possible future development, on the ground of the findings produced by the present research, the major tendencies can be summarized in the following way: the predominance of Type II (verbs from action nouns) will probably continue – it is the most easily functioning process. Type IV (nouns from adjectives) will probably decrease in productivity. The same applies to Type I (verbs from agent nouns): it seems to be decreasing, perhaps as a result of competition with Type II. The suffix *-ing* is growing in frequency and will be probably more and more often involved in the process of BF. Stylistically unmarked words will probably form the main volume of back-formed words, but technically and scientifically marked words also have high potential in the given process. Compounds will probably become a more frequent source (and so the result) of BF.

We must not forget that many new BFs can arise from older words rather than neologisms, so predictions about the possible developments in the future have to be based mainly on the comparison of relatively short periods (e.g. decades) during the whole of the 20<sup>th</sup> century, and on the actual back-formed items.

Nevertheless, the analysis of potential BFs formed from the most recent words has also contributed to some interesting results. It has shown the potential of the newly formed vocabulary for further word-formation. The rules of the process of BF and its typology, established by Pennanen, a scholar who has dealt with this phenomenon more than any other linguists, prove to be a good methodological starting point for further research of BFs and are also easily applicable to the study of the most recent nonce-formations.

## 11 CONCLUSION

The objective of the present study was to provide a comprehensive description and analysis of English BF in the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century. Although this word-formation process, indeed, belongs to minor processes through which new words are formed in English, it seems to be fairly productive at present.

What is more, it is not confined to English, but occurs in other languages, too. For this reason, applying a contrastive approach in the present study, I, among other things, examined whether a process comparable to English BF obtains in Czech and came to the conclusion that a morphological process that would be entirely identical to English BF does not exist in Czech. There is, nevertheless, a phenomenon in Czech – characterized by the removal of the word-forming suffix and by the formation of a morphologically simpler word – that can be loosely referred to as BF (bearing some similarity to the process in English), but the word-formation types involved are different from those formed in English BF.

The core of the present work being the investigation of the situation in English, it focuses mainly on the last part of the given period and aims at highlighting the most typical features of this morphological process today, resulting from its development over the whole century. The description and analysis of the situation from the beginning of the 20<sup>th</sup> century till the present time is based on the total sample of 700 items. In addition, the material includes another 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 my method (a combination of Pennanen's original typology and characteristics resulting from the present research). This method was also used in a similar way in an experiment with neologisms, among which 60 hypothetical BFs were suggested: 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 had 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 I approached the subject matter from both diachronic and synchronic points of view. In order to achieve the aims and acquire relevant information, I studied a number of theoretical sources and examined a set of general linguistic dictionaries that had been substantially updated, the oldest in 1995, the latest in 2009, so that I could collect a sufficient amount of relevant material. Apart from the dictionaries I made use of other sources, especially

those dealing with neologisms which I saw as an important part of my sample. In the selected dictionaries, I was primarily looking for words labelled explicitly as BFs (a sign of consensus on their status). In that stage of the research, the diachronic approach was inevitable: I had to compare the dates of occurrence of the source words and the resulting BFs. However, not always was the sought-for form entered as a headword; sometimes it was listed as one of its (back-)derivatives, so I had to examine the whole entry carefully in order to find the relevant item and further grammatical and semantic information. Often, the content analysis described by Marchand (1969), was a significant factor which helped to identify the relevant items. Based on this analysis I could identify certain back-formed items not only from the diachronic point of view, i.e. by discovering its later date of occurrence than that of the longer source word, but also synchronically, through the definition of the resulting word that contained in itself the source word as its necessary part (as in the classical examples: *burgle* “act as a burglar”; *televise* “put on television”). In other cases, I had to compare information about the origin of the words in various sources, including different dictionaries and Internet sources in order to be able to come to the conclusion about the appropriate classification of a particular lexical unit. 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, linguistic knowledge and sometimes even linguistic intuition were the best instruments that helped to decide their status.

The material collected has been classified into nine types according to several aspects. The most important one is the part of speech of both the resulting word (BF) and the source item (the longer, morphologically more complex word). With some source words, classification is also based on some kind of specific feature – the semantic reference, namely the role of agent or reference to action, or the abstract nature in the categories of nouns. In general, the nine-class BF typology applied to any of the subsamples regardless of the specific objective of the particular part of research. It derives from the typology established by Pennanen (1966), whose classical study is the methodological point of departure of the present research. Pennanen’s original typology including six basic types of BFs (verbs from agent nouns, verbs from action nouns, verbs from adjectives, nouns from adjectives, nouns from other, morphologically more complex nouns and adjectives from abstract or action nouns) was extended in the present work by three more types: adjectives from agent nouns, prefix BFs and inflectional BFs. As far as the prefix BFs and inflectional BFs are concerned, Pennanen does not consider these as relevant items (see Chapter 6). In the present study, however, I have included both these types in my material and added them to the original typology as Types VIII and IX. They are generally referred to as examples of BF in the literature by various authors (e.g. Bauer, 1983, Katamba,

2006) and I also believe that they 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. Prefix BFs found in my samples are mainly based on the relation of antonymy and hyponymy and they are represented by various parts of speech – nouns, adjectives and verbs. They are morphologically simplex and often belong to technical terminology. Inflectional BFs in my material result from the subtraction of either real or wrongly interpreted plural suffixes. They are prevalently monomorphemic and stylistically neutral.

In addition, I extended Pennanen's original typology by one more type of BFs, namely adjectives from agent nouns. The category is small but there were several factors that led me to consider it a new type. Firstly, one potential item of this type was found for the first period: *paratroop*. I refer to it as potential because the information in various dictionaries about its origin is different. MW's UD suggests that the source word is *paratroops*, which is a concrete plural noun. This, however, differs from what is expected in Type VI from the point of view of the typology: the usual source word is an abstract noun. Random House Dictionary, on the other hand introduces the agent noun *paratrooper* as the source word for the adjective *paratroop*. This pair of words then could be classified as a new type. Secondly, some other relevant items are found in the material of the second half of the 20<sup>th</sup> century and share some common features as a class (mainly grammatical and stylistic). 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 and so added to the sample of confirmed hypothetical formations (*cruciverbal* < *cruciverbalist*). As a result, this category is recognized here a separate class and is referred to as Type VII. These findings have finally yielded an answer to the question formulated at the end of Chapter 7.1.6 above where the hope is expressed that such a type may be found among the items from the second half of the twentieth century when the rest of the material is collected analyzed and described.

On the other hand, there is another type of reduced words which I do not include in my typology, although they are referred to as instances of BF in the literature. Katamba (2006) surprisingly classifies hypocorisms (especially familiar versions of personal names in various languages, e.g. *Iza* or *Zabe* for *Isabelle* in French) as BFs and describes the process as the truncation of a longer word without the excuse of there being an affix that is removed. However, for the subtracted part to be an affix (whether real or supposed) is, in my opinion, one of the basic principles of BF distinguishing this process from other types of shortening. This balancing between a mere shortening and BF is also reflected in my own research when analyzing the

sample of “suspect” but unconfirmed BFs: three words have been classified as being on the borderline of the two processes (*bilat* < *bilateral meeting*, *cat* < *catalytic converter* and *decaf* < *decaffeinated coffee*).

All the nine classes of BFs have been analyzed and described synchronically from morphological, semantic and stylistic points of view. Statistics for individual decades have been made so that we can follow the gradual quantitative and qualitative development of this word-formation process over the whole period. As far as the quantity during the second period is concerned, there is a decreasing tendency toward the end (the present), which is logical as the older vocabulary is much more firmly established and new words come into the lexicon gradually and very slowly. In weighing the pros and cons of strict reliance on dictionary evidence the decisive argument was the consensus of the professional lexicographers not only as to what is a BF, but also which of them are likely to survive. So the latest decades are much “poorer” than the beginning of the period.

In each type, the material is evaluated using the common frame of description which takes into account semantic characteristics of the source and resulting words, morphological structure of BFs including the shares of *simplicia* (simple derivatives and monomorphemic words) and *composita* (furthermore categorized into full-word compounds and neoclassical compounds), involvement of particular, repeatedly occurring suffixes and stylistic value of all items.

On the basis of the detailed description and analysis of the whole material the present study is able to give a comprehensive account of the development of this word-formation process from the beginning of the 20<sup>th</sup> century until today, to compare the samples of the two individual periods and highlight the most typical features of BF at present. In addition, conclusions about the expected further development of this process can be drawn.

The first half of the 20<sup>th</sup> 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 OED (2009), for example, formed in the first half of the 20<sup>th</sup> century, were made as late as the 1990s or the beginning of the 21<sup>st</sup> century. In fact, the sample of the latest period forms one third of the material of the whole 20<sup>th</sup> century (229 out of 700). At the same time, however, we have to realize that the original sample of BFs of the first half of the 20<sup>th</sup> century collected and described by Pennanen amounted to 225 words, which is almost the same size as that of my own sample for the second period (229). The high number of BFs dating from the

first period (471) was actually reached by counting in my 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 BF as remaining on the same level as it was in the first half of the 20<sup>th</sup> century. We can expect that the present sample will increase if someone decides to check the number of BFs in this period in forty to fifty years from now. This finding also supports my assumption that the quantitative aspects of the material should be compared from a distance of time. Therefore, it is more effective, for the purpose of this research, to compare the quantitative indicators only within one period and synchronically, i.e., in terms of individual types and their qualitative description, for example the sizes of individual types, the frequency of suffixes involved, the prevailing semantic reference or stylistic value.

The most productive process within BF is the formation of verbs from action nouns (Type II, e.g. *gentrify* < *gentrification*): it remained such over the whole 20<sup>th</sup> 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). This trend has been also reflected in the sample of unconfirmed BFs (50 %) and even in the sample of potential BFs (50 %), and the subsequently confirmed ones in informal communication (43 %).

Formation of verbs from agent nouns (Type I, e.g. *topline* < *topliner*) 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. BF of verbs from adjectives (Type III, e.g. *silicone* < *siliconed*) almost disappeared during the 20<sup>th</sup> century and the estimated tendency for the future is not very favourable either – there are neither any items in the sample of unconfirmed BFs, nor among the confirmed potential ones.

Adjectives can be seen as a minor source of back-formed nouns (Type IV, e.g. *flash* < *flashy*), probably decreasing in productivity; their share in the sample of the second period is smaller than that of the first and they are not involved in the sample of neologisms at all. On the other hand, this class shows most expressively how much later research of the same period (in this case after 50 years) can change the results. Compared to Pennanen's results in the 1960s – 13 items of this type (Type IV) for the first half of the 20<sup>th</sup> century – I have found 56 more items now for the same period, which has changed the position of this type in the whole sample regarding the first period. The category has become the third most frequent. For the second period, however, the sample contains only 24 of such back-formed nouns.

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; in addition, they form a major portion among the potential BFs deriving from neologisms as well as a large part of the confirmed ones. The following examples, most frequently verbs, come from the latest period: *word-process* < *word processing* (“to edit, produce, etc. by electronic means, using a word processor”, 1985), *carjack* < *car-jacking* (“to steal or commandeer an occupied car by threatening the driver with violence”, 1991), *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”, 1999).

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, 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. The large proportion of technical terms, especially verbs, in the 20<sup>th</sup> century reflects the same process as the one that occurred in the peaks of recorded BFs in history (the middle of the 17<sup>th</sup> century and in the 19<sup>th</sup> century): borrowed suffixed nouns resulting in the subsequent need for the respective verbs, which triggered the process of BF. Examples of such BFs are: *hypocrise* (1680), *diagnose* (1861), *phagocytose* (1912), *physisorb* (1966). 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”, 1977; *Tase* < *Taser*, “to use a Taser (a weapon)”, 1991). This tendency has been kept up from the first period.

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. The most recent examples are: *plore* < *explore* (“a museum exhibit

which demonstrates some scientific principle in action”, 1989), *concerting* < *disconcerting* (“suitable, comfortable”, 2003). 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 (*cruciverbal* < *cruciverbalist*) that might continue in occurrence, but this prognosis needs a longer time to be confirmed.

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 20<sup>th</sup> 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 my own research on neologisms. Among the originally potential and later 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 BFs (41%) lends support to the claim that the typology and principles used in the present research are sound and functional. Some of the confirmed potential BFs are: *cold-fax* < *cold-faxing* (“to send unsolicited material by fax”), *Disneyfy* < *Disneyfication* (“to implement Disneyfication”), *infotain* < *infotainment* (“to present information in an entertaining way”), *girocrat* < *girocracy* (“a person who is dependent on social-security payments”), *customed* < *un-customed* (of goods: “having had the customs duty paid”).

On the grounds of the findings produced by my research, I can therefore summarize its major results in the following way:

- **Productivity of BF remains at the same level** as it was in the first half of the 20<sup>th</sup> century.
- **The most productive process within BF is the formation of verbs from action nouns**; in fact we can speak of a rather dramatic increase in BF from action nouns at present, compared to the beginning of the 20<sup>th</sup> century, making it an important source of new verbs in English.
- **BF 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.

- **There is a growth in the participation of compounds in this process**; they represent 55 % in the sample from the latest period.

- **The most frequent subtracted suffixes are *-ing*, *-ion/-ation* and *-er***, all of them being involved in the formation of verbs

- **Suffix *-ing* has become the most frequent suffix** subtracted in BF.

- **Stylistically unmarked items prevail**, but they are often limited in use.

- **Prefix BFs continue to be formed.**

- **Inflectional BFs seem to be on the decrease.**

- **The class of adjectives back-formed from agent nouns is a new type** that might continue in occurrence.

- As far as the expectations for the future are concerned, **the predominance of Type II (verbs from action nouns) will probably continue** – it is the most easily functioning process. **Type IV (nouns from adjectives) will probably decrease in productivity. The same applies to Type I (verbs from agent nouns)**: it seems to be decreasing, perhaps as a result of competition with Type II. **The suffix *-ing* is growing in frequency** and will be probably more and more often involved in the process of BF. **Stylistically unmarked words will probably form the main volume of back-formed words**, but technically and scientifically marked words also have high potential in the given process.

- **Compounds will probably become a more frequent source (and so the result) of BF.**

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 20<sup>th</sup> century will be definitely different in a few decades, as those items which are only potential now might become real 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 or other corpora 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.

## APPENDIX I

### Pennanen's sample: alphabetical list of BFs - the first half of the 20<sup>th</sup> century (225 items)

1. admire	56. cross-refer	111. lip-read
2. aerodyne	57. custom-make	112. loan-translate
3. air-condition	58. dish-wash	113. lorry-hop
4. air-evacuate	59. dive-bomb	114. lyse
5. airmark	60. elocute	115. maffick
6. air-ship	61. emote	116. map-read
7. androgen	62. face-lift	117. mass-produce
8. ank	63. fact-find	118. metronym
9. apple-polish	64. fascise	119. mixbathe
10. auth	65. fellow-travel	120. mountain-climb
11. autolyse	66. fire-watch	121. mug
12. automate	67. flag-wag	122. mush-fake
13. aviate	68. flight-deliver	123. name-drop
14. avigate	69. game-keep	124. night-fly
15. baby-sit	70. garrul	125. night-herd
16. baby-snatch	71. gate-crash	126. night-walk
17. back-fire	72. ghost-write	127. non-intervene
18. back-form	73. gift-wrap	128. obedience-train
19. back-scratch	74. glam	129. outmode
20. back-seat-drive	75. glide-bomb	130. panhandle
21. back-slap	76. gold-dig	131. pattern-bomb
22. bargain-hunt	77. google	132. peeve (v.)
23. bar-keep	78. gramp	133. peeve (n.)
24. beach-comb	79. group-think	134. penure
25. belly-land	80. guest-conduct	135. phon
26. benevol	81. haemolyse	136. pinch-hit
27. best-sell	82. half-choke	137. playwrite
28. blizz	83. half-starve	138. plum(b)
29. bludge	84. hay-make	139. poetast
30. body-snatch	85. hedge-hop	140. pot-hunt
31. book-keep	86. high-brow	141. pot-shoot
32. bootleg	87. high-jack	142. pre-fabricate
33. bottle-feed	88. hitch-hike	143. pressure-cook
34. bottle-wash	89. hitle	144. price-fix
35. brain-wash	90. hoke	145. prize-fight
36. breast-feed	91. home-deliver	146. prognose
37. brill	92. home-keep	147. proof-read
38. cabinet-make	93. house-break	148. propaganda
39. cake-eat	94. house-clean	149. psychoanalyse
40. carol-sing	95. housepaint	150. quisle
41. cavitate	96. husband-hunt	151. rabble-rouse
42. chain-react	97. inconvene	152. radiolocate
43. chain-smoke	98. involute	153. reluct
44. chauf	99. island-hop	154. reparate
45. cheer-lead	100. jank	155. repug
46. chiropract	101. jet-propel	156. retice
47. Christmas-shop	102. jum-shoot	157. reune
48. city-edit	103. junk	158. rice
49. coit	104. kibitz	159. rough-land
50. congest	105. kick-start	160. sardine-pack
51. copy-read	106. lab-examine	161. schlent
52. counter-jump	107. lead-poison	162. school-teach
53. cow-punch	108. lech	163. self-determine
54. crash-land	109. liaise	164. self-feed
55. crise	110. libel-sue	165. self-hypnotize

166. self-ignite
167. set-shoot
168. shab
169. shadow-box
170. sharecrop
171. shop-walk
172. shotgun-marry
173. side-dress
174. sight-read
175. skin-dive
176. skip-bomb
177. sky-write
178. slave-drive
179. sleep-walk
180. snoot
181. soft-land
182. sound-condition
183. soundproof
184. speed-read
185. spike
186. spinst
187. stag-head
188. steam-roll
189. stigmat
190. stinge
191. storm-toss
192. strap-hang
193. stream-line
194. student-teach
195. summer-board
196. sun-bathe
197. surf-bathe
198. surf-ride
199. tailor-make
200. tape-record
201. tax-pay
202. telepath
203. tenant-farm
204. town-plan
205. trench-dig
206. trial-subscribe
207. televise
208. telephotograph
209. trig
210. trouble-shoot
211. turbosupercharge
212. tute
213. two-time
214. type-cast
215. vacuum-clean
216. verge
217. vive
218. warb
219. watch-keep
220. whipper-snap
221. windjam
222. window-clean
223. window-dress
224. window-shop
225. wire-tap

## APPENDIX II

### New sample of BFs from the 1<sup>st</sup> half of the 20<sup>th</sup> century (246 items)

#### TYPE I: verb from agent noun (37 items)

##### 1. **adolesce**

MW'sUD: intr. v. f. *adolescent* & *adolescence* adj. /n.; to grow toward maturity: pass through adolescence; OED4: 1909

##### 2. **bartend**

MW'sUD: tr. / intr. v. f. *bartender* n.; to serve (drinks), esp. in a bar; to act as a bartender, esp. professionally; OED4: 1948, orig. and chiefly N. Amer.

##### 3. **bird-watch**

MW's 11<sup>th</sup> CD: 1948, intr. v. f. *bird-watcher* n.; to observe or identify wild birds in their natural environment

##### 4. **bus**

OED4: 1952, tr. v. f. *busboy* n. (a man or boy who assists a waiter at a hotel, restaurant, etc.); to clear (a table) of dirty dishes, etc., as in a restaurant or cafeteria; also, to carry or remove (dishes) from the table. N. Amer.

##### 5. **cliff-hang**

MW's 11<sup>th</sup> CD: 1946, intr. v. f. *cliff-hanger* n., informal; to await the outcome of a suspenseful situation; OED4: cliff-hanger: any story, play, etc., in which suspense is a main concern; Americanism

##### 6. **co-drive**

OED4: 1952, tr. v. f. *co-driver* n.; to take turns with another or others to drive a vehicle (esp. in a motor race, rally, etc.)

##### 7. **compand**

OED4: 1951, tr. v. f. *compander* n.; telecommunications and electronics: to subject (a signal) to the action of a compander, usually in order to reduce the dynamic range and noise.

##### 8. **copyedit**

D.com: 1950-55, tr. v. f. *copy editor* n., also copy-edit; 1. to edit (a manuscript, document, text, etc.) for publication, esp. for punctuation, spelling, grammatical structure, style, etc.; 2. to copyread

##### 9. **curate**

OED4: 1909, tr. v. f. *curator* n.; to act as a curator, to look after and preserve

##### 10. **doze**

MW's 11<sup>th</sup> CD: 1945, tr. v. f. *dozer* n. (bulldozer), = bulldoze<sup>2</sup>; to move, clear, gouge out, or level off by pushing with or as if with a bulldozer

##### 11. **double-head**

MW'sUD: intr. / tr. v. f. *doubleheader* n., intr. v.: to run powered by two locomotives; tr. v.: to pull (a train) with two locomotives; OED4: 1904, orig. U.S.

##### 12. **escalate**<sup>1</sup>

MW's 11<sup>th</sup> CD: 1944, v. f. *escalator* n., intr. v.: to increase in extent, volume, number, amount, intensity, or scope; tr. v.: enlarge; OED4: 1922, tr. v.: to climb or reach by means of an escalator; intr. v.: to travel on an escalator

##### 13. **escalate**<sup>2</sup>

OED4: 1959, v. f. *escalator* n.; fig. (tr. and intr.): to increase or develop by successive stages; spec. to develop from 'conventional' warfare into nuclear warfare

##### 14. **freeload**

D.com: 1950-55, tr. / intr. v. f. *freeloader* n.; informal: 1. to take advantage of others for free food, entertainment, etc.; 2. to get by freeloading; Americanism

##### 15. **knuckle-dust**

OED4: 1909, tr. v. f. *knuckle-duster* n., to strike with a knuckle-duster (a metal instrument protecting knuckles); slang, U.S.

##### 16. **micronize**

OED4: 1940, tr. v. f. *Micronizer* n. (proprietary name in U.S.); to break up into very fine particles

##### 17. **muck-rake**

OED4: 1910, tr. v. f. *muck-raker* n.; to subject (powerful persons or institutions) to allegations of corruption or other illegal or scandalous behaviour; to discover and publish (such scandals); to examine (political districts) so as to determine the extent of corruption; U.S.

##### 18. **overachieve**

OED: 1953, intr. v. f. *overachiever* n.; psychology: 1. to perform, esp. academically, above the potential indicated by tests of one's mental ability or aptitude; 2. to perform better or achieve more than expected, esp. by others

##### 19. **penny-pinch**

MW'sUD: tr. v. f. *penny pincher* n.; to give out money to in a niggardly manner; MW's 11<sup>th</sup> CD: after 1935

**20. pinhook**

DARE: 1951, intr. v. f. *pinhooker* n.; to act as a pinhooker (a small speculator in tobacco at a local market)

**21. razor-slash**

OED4: 1958, tr. v. f. *razor-slasher* n. (one who slashes another (usu. across the face) with a razor; a member of a razor gang); to slash with a razor

**22. redbait**

OED4: 1940, v. f. *redbaiter* n. / *redbaiting* n.; orig. U.S.; to denounce or deprecate as a political radical, esp. to accuse of being communist

**23. rotavate, rotovate**

OED4: 1959, tr. v. f. *Rotavator*, *Rotovator* n. (also with small initials: proprietary names of a machine with rotating blades designed to break up or till soil), to prepare (a field, garden, etc.) with a Rotavator; to work (a substance) into the soil by means of a Rotavator

**24. rototill**

MW's 11<sup>th</sup> CD: 1939, tr. v. f. *rototiller* n.; to till or plow (soil) with a rototiller; OED4: *rototiller*: a machine with rotating blades or prongs designed to break up or till soil; registered in the U.S. as a proprietary name

**25. second-guess**

OED4: 1941, tr. v., prob. BF from *second-guesser* n., colloquial (orig. and chiefly N. Amer.): 1 to anticipate the action of (a person), to out-guess; to predict or foresee (an event), to apprehend (simultaneously or beforehand) by guess-work; 2 1946: to subject (a person or his action, esp. a decision) to criticism after the result of the action is known; to judge, question, or reconsider by hindsight; also intr. v.

**26. sedate**

MW's 11<sup>th</sup> CD: 1945, tr. v. f. *sedative* n., to dose with sedatives; OED4: Medicine, to make (a patient) sleepy or quiet by means of drugs; to administer a sedative to

**27. sidewind**

D.com: 1925-30, v. f. *sidewinder* n. (a small rattlesnake of the southwest United States and Mexico that moves by a distinctive lateral looping motion of its body and has two hornlike scaly projections above its eyes); to move like a sidewinder

**28. skyscrape**

MW'sUD: intr. v. f. *skyscraper* n., to build a skyscraper; OED4: after 1947

**29. spelunk**

OED4: 1946, intr. v. f. *spelunker* n. / *spelunking* n.; to explore caves, esp. as a hobby; Am. slang

**30. squeg**

MW'sUD: intr. v. f. *squegger* n. (tube in which the valve oscillates); OED4: 1933, electronics; (of an electrical circuit) to oscillate intermittently, to be self-quenching

**31. switch-hit**

MW's 11<sup>th</sup> CD: 1938, intr. v. f. *switch-hitter* n.; to bat right-handed against a left-handed pitcher and left-handed against a right-handed pitcher in baseball; OED4: *switch-hitter*: U.S. baseball, an ambidextrous batter; also transf. (colloq.) in sporting and gen. contexts; slang, a bisexual

**32. talent-spot**

OED4: 1937, tr. / intr. v. f. *talent-spotter* n.; to look for suitably talented persons with a view to their employment by an organization (a sports club, recording company, etc.)

**33. transduce<sup>1</sup>**

OED4: 1949, tr. v. f. *transducer* n.; to alter the physical nature or medium of (a signal); to convert variations in (a medium) into corresponding variations in another medium.

**34. transduce<sup>2</sup>**

OED4: 1952, v. f. *transducer* n.; microbiology: of a virus: to transfer (genetic material) from one bacterium to another; also, to transfer (a genetic characteristic) from one bacterium to another using a virus

**35. underachieve**

OED4: 1954, intr. v. f. *under-achiever* n. (psychology: someone whose actual performance consistently fails to reach the level predicted by intelligence tests or other measures of ability); to fail to reach the level predicted by intelligence tests

**36. varitype**

OED4: 1955, tr. v. f. *VariTyper* n. (the proprietary name of a kind of typewriter that has interchangeable type faces; also, a kind of type-composing machine with similar operation); orig. and chiefly U.S.; to use a VariTyper to type sth.

**37. zip**

MW's 11<sup>th</sup> CD: 1932, tr. / intr. v. f. *zipper* n.; 1 a: to close or open with or as if with a zipper, b: to enclose or wrap by fastening a zipper, 2: to cause (a zipper) to open or shut; intr. v.: to become open, closed, or attached by means of a zipper

**TYPE II: verb from action noun (79 items)**

**1. abreact**

COD 9<sup>th</sup>: tr. v. f. *abreaction* n.; psychoanalysis: to remove by abreaction (release of emotional tension achieved through recalling a repressed traumatic experience); MW's 11<sup>th</sup> CD: after 1912

**2. acculturate**

MW's 11<sup>th</sup> CD: 1930, tr. v. f. *acculturation* n.; to change through acculturation; OED4: tr. and intr. v., to cause to change or to become changed through acculturation; chiefly U.S.

**3. advect**

OED4: 1957, tr. v. f. *advection* n.; meteorology, Oceanography: to convey by (esp. horizontal) mass movement of a fluid

**4. appersonate**

MW's UD: tr. v. f. *appersonation* n. (= the unconscious assumption of the personality characteristics of another, usually well known, person); to subject to appersonation; D.com: after 1935, Psychiatry

**5. auto-suggest**

OED4: 1921, tr. /intr. v. f. *auto-suggestion* n.; to produce, remove, or influence, by auto-suggestion; specifically in psychology

**6. blockbust**

MW's 11<sup>th</sup> CD: after 1954, v. f. *blockbusting* n. / *blockbuster* n.; D.com: Americanism: to subject or be subjected to blockbusting (the profiteering practice by unscrupulous real-estate agents or speculators of reselling or renting homes that they obtain by inducing panic selling at prices below value, esp. by exploiting racial prejudices)

**7. brute**

MW's UD: tr. v. f. *bruting* n.; to shape (a diamond) by rubbing or grinding with another diamond or a diamond chip; OED4: 1903

**8. carboxylate**

OED4: 1934, tr. v. f. *carboxylation* n.; biochemistry: to introduce a carboxyl group into (a molecule or compound); to convert into by carboxylation.

**9. chemisorb**

OED4: 1935, tr. v. f. *chemisorption* n.; chemistry: to collect by chemisorption

**10. choreograph**

MW's UD: tr. / intr. v. f. *choreography* n.; tr. v.: to undertake or compose the choreography of (as a ballet or a poem); intr. v.: to serve as choreographer, to engage in choreography; OED4: 1943, orig. U.S.

**11. chromatograph**

OED4: 1953, tr. v. f. *chromatography* n.; chemistry: to separate or analyse by chromatography

**12. convect**

OED4: 1953, tr. / intr. v. f. *convection* n. / *convected* adj.; to transport (heat, air, etc.) by convection; to be convected; to undergo convection

**13. co-vary**

OED4: 1950, intr. v. f. *covariation* n.; to change together with something else so as to preserve certain interrelations unchanged

**14. decarboxylate**

OED4: 1922, tr. / intr. v. f. *decarboxylation* n.; chemistry: a) tr. v.: to remove a carboxyl group from. b) intr. v.: to lose a carboxyl group, to undergo decarboxylation

**15. decompensate**

MW's UD: intr. v., prob. BF f. *decompensation* n.; to undergo decompensation; MW's 11<sup>th</sup> CD: after 1903

**16. dedifferentiate**

MW's UD: intr. v. f. *dedifferentiation* n.; to undergo dedifferentiation, lose specialization of form or function; D.com: 1915-20, biology

**17. defibrillate**

D.com: 1930-35, tr. v. f. de- + *fibrillation* n.; medicine: to arrest the fibrillation of (heart muscle) by applying electric shock across the chest, thus depolarizing the heart cells and allowing normal rhythm to return

**18. demodulate**

OED4: 1932, tr. v. f. *demodulation* n.; electricity: a) to subject to demodulation; to separate a modulating signal from (a modulated wave or carrier); b) to recover (a modulating signal) from or from a modulated wave or carrier

**19. derivatize**

OED4: 1939, tr. v. f. *derivatization* n.; chemistry: to convert (a compound) into a derivative.

**20. desorb**

OED4: 1924, tr. / intr. v. f. *desorption* n.; a) tr. v.: to remove (a substance, etc.) from the surface upon which it is adsorbed; b) intr. v.: of a substance, etc.: to leave the surface upon which it is adsorbed (and pass into)

**21. destruct**

OED4: 1958, v. f. *destruction* n.; chiefly U.S.: to destroy

**22. ecphore**

MW'sUD: tr. v., prob. BF f. *ecphoria* n.; to evoke or revive (an emotion, a memory, or the like) by means of a stimulus; OED4: 1917, Psychology

**23. excyst**

OED4: 1913, intr. v. f. *excystation* n.; biology and medicine: to undergo excystment; to emerge or be released from a cyst

**24. exsolve**

OED4: 1942, tr. / intr. v. f. *exsolution* n.; geology: tr. v.: to form by exsolution; intr. v.: to separate out by exsolution

**25. exflagellate:**

MW'sUD: intr. v. f. *exflagellation* n.; 1 biology: to cast off cilia or flagella; 2 of sporozoans: to form microgametes by extrusion of nuclear material into peripheral processes of gametocyte cytoplasm that resemble flagella; OED4: 1912, Zoology

**26. fellate**

MW's 11<sup>th</sup> CD: 1941, v. f. *fellatio* n.; tr. v.: to perform fellatio on; intr. v.: to fellate someone; OED4: 1968

**27. fluoridate**

OED4: 1949, tr. v. f. *fluoridation* n.; to introduce a fluoride into: to fluoridate drinking water; to add a fluoride to (as drinking water) to reduce tooth decay.

**28. fragmentate:**

MW'sUD: v. f. *fragmentation* n.; to break into pieces especially explosively; D.com: 1940-45

**29. gelate**

OED4: 1915, v. f. *gelation* n.; biology; MW'sUD: to change into or take on the form of a gel: become more solid

**30. hyperventilate**

OED4: 1931, tr. / intr. v. f. *hyperventilation* n.; physiology: a) intr. v.: to breathe deeply or rapidly; b) tr. v.: to produce hyperventilation in

**31. ice-fish**

OED4: 1907, intr. v. f. *ice-fishing* n., to fish in winter through holes made in the ice

**32. Indian-wrestle**

MW's 11<sup>th</sup> CD: 1938, intr. v. f. *Indian wrestling* (a noun phrase); to engage in Indian wrestling; D.com: Americanism

**33. infantilize**

MW's 11<sup>th</sup> CD: 1943, tr. v. f. *infantilization* n.; 1 to keep in or reduce to an infantile state; 2 to treat or regard as infantile or immature

**34. inscript**

OED4: 1923, tr. v. f. *inscription* n., to inscribe

**35. intercool**

MW'sUD: tr. v. f. *intercooling* n.; to cool (a fluid) in an intercooler; OED4: 1944

**36. interconvert**

OED4: 1953, tr. v. f. *inter-conversion* n.; to convert into one another

**37. introgress**

OED4: 1958, intr. v. f. *introgression* n.; to be transferred by introgression into another species.

**38. introject**

OED4: 1925, tr. v. f. *introjection* n. (intro + projection); psychology: to incorporate an inward image of (an external object, or the values and attitudes of others) into oneself

**39. job-hunt**

OED4: 1946, intr. v. f. *job-hunting* n.; seek employment

**40. keeper**

OED4: 1921, tr. v. f. *keeping* n.; to look after as a gamekeeper

**41. lenite**

MW'sUD: tr. / intr. v. f. *lenition* n.; tr. verb: to transform by lenition; intr. verb: to undergo lenition; OED4: 1912, phonology

**42. loud-hail**

OED4: 1943 tr. and intr. v. f. *loud-hailing* n.; to speak or call through a loud-hailer, to address (someone) through a loud-hailer; also figurative

**43. metalate**

MW'sUD: tr. v. f. *metalation* n.; chemistry: to bring about metalation in (the introduction into an organic compound of an atom of a metal in place of one of hydrogen); OED4: 1939

**44. mirate**

MW's UD: intr. v., prob. BF f. *miration* n.; to feel or express surprise or admiration; used with about, at, on, over; OED4: 1950, U.S. regional, colloquial

**45. mutarotate**

OED4: **1951**, intr. v. f. *mutarotation* n.; chemistry: to undergo mutarotation

**46. notate**

MW's 11<sup>th</sup> CD: **1903**, tr. v. f. *notation* n.; to put into notation

**47. parcellate**

OED4: **1934**, tr. v. f. *parcellation* n.; rare, to divide into separate parcels or portions

**48. pend**

OED4: **1953**, tr. verb f. *pending* n.; chiefly commerce: to treat (an issue, etc.) as pending; to postpone deciding or attending to, defer

**49. perseverate**

OED4: **1915** intr. v. f. *perseveration* n.; psychology: to repeat a response after the cessation of the original stimulus

**50. phagocytose**

MW's 11<sup>th</sup> CD: **1912**, tr. v. f. *phagocytosis* n., to consume by phagocytosis; OED4: biology, to engulf or absorb (a cell or particle) like a phagocyte, so as to isolate or destroy it.

**51. pinocytose**

D.com: **1955-60**, intr. v. f. *pinocytosis* n. (the transport of fluid into a cell by means of local infoldings by the cell membrane so that a tiny vesicle or sac forms around each droplet, which is then taken into the interior of the cytoplasm); physiology: (of a cell) to take within by means of pinocytosis

**52. planograph**

MW's UD: tr. v. f. *planography* n.; to print by planography; MW's 11<sup>th</sup> CD: after **1909**

**53. poltick**

OED4: **1917**; MW's 11<sup>th</sup> CD: **c.1934**, intr. v. f. *politicking* n.; to engage in often partisan political discussion or activity

**54. polygonize**

OED4: **1949**, intr. v. f. *polygonization* n.; metallurgy: to undergo or give rise to polygonization

**55. practice-teach**

MW's CD: **1952**, intr. v. f. *practice teaching* n.; to engage in practice teaching

**56. pyrolyze**

MW's 11<sup>th</sup> CD: **1932**, tr. v. f. *pyrolysis* n.; chemistry: to subject (a substance) to pyrolysis

**57. racialize**

MW's UD: tr. v. f. *racialization* n.; to subject to racialization (the process of making or becoming racialist in outlook or sympathies); OED4: **1930**

**58. reflate**

MW's UD: tr. / intr. v. f. *reflation* n.; intr. v.: to expand again the quantity of currency and credit after a period of deflation; tr. v.: to expand again the amount of (currency and credit); OED4: **1932**

**59. repercuss**

OED4: **1923**, intr. v. f. *repercussion* n.; to cause or admit of repercussions; to have an unwanted or unintended effect; to reflect or rebound on sth.

**60. revalorize**

MW's UD: tr. v. f. *revalorization* n.; to change the valuation of (as assets or currency), following an inflation; OED4: **1928**

**61. revaluate**

MW's 11<sup>th</sup> CD: **1921**, tr. v. f. *reevaluation* n.; specifically: to increase the value of (as currency); OED4: **1949**, to reassess, form a new valuation of

**62. scapegoat**

OED4: **1943**, tr. v. f. *scapegoating* n.; to make a scapegoat of (someone); to subject to scapegoating

**63. seriate**

OED4: **1944**, tr. v. f. *seriation* n.; to arrange (items) in a sequence according to prescribed criteria

**64. show-jump**

OED4: **1936**, intr. v. f. *show-jumping* n., compete in show-jumping

**65. sorb**

OED4: **1909**, tr. v. f. *sorption* n.; after *absorb*, *absorption*; physical chemistry: to collect by sorption; intr. v.: **1970**, = pass

**66. spermatize**

OED4: **1932**, tr. v. f. *spermatization* n.; mycology: to effect spermatization upon, rare

**67. steam-distill**

MW's UD: tr. / intr. v. f. *steam distillation* n.; chemistry: tr. v.: to subject to steam distillation, intr. v.: to undergo steam distillation; OED: **1923**

**68. subassemble**

MW's UD: tr. v. f. *subassembly* n.; to fabricate (as parts) into a subassembly; prepare (a structural unit) as a subassembly; OED4: **1940**

**69. subincise**

MW's UD: tr. v. f. *subincision* n.; to perform subincision upon (a ritual mutilation performed as a part of puberty rites among some native Australian and Fijian groups that involves slitting the underside of the penis with permanent opening of the urethra); OED4: **1904**

**70. subvocalize**

OED4: **1947**, tr. / intr. v. f. *subvocalization* n.; to utter or form (words) by subvocalization

**71. superinfect**

OED4: **1954**, tr. v. f. *superinfection* n. (reinfection or second infection with the same type of bacteria or other parasites); medicine: to cause or produce superinfection

**72. superovulate**

OED4: **1956**, tr. v. f. *superovulation* n. (response to a superovulating technique; broadly: production of exceptional numbers of eggs at one time); physiology: intr. v.: to produce abnormally large numbers of ova at a single ovulation; tr. v.: to cause (an animal) to do this

**73. surveil**

MW's 11<sup>th</sup> CD: **1914**, tr. v. f. *surveillance* n.; to subject to surveillance; OED4: **1960**; D.com: **1960-65**

**74. symbiose**

OED4: **1960**, intr. v. f. *symbiosis* n., to associate symbiotically, to live as a symbiont

**75. telecommunicate**

D.com: after **1932**, tr. v. f. *telecommunications* pl. n.; to transmit (data, sound, images, etc.) by telecommunications

**76. teleport**

MW's 11<sup>th</sup> CD: **1947**, tr. v. f. *teleportation* n.; to transfer by teleportation; OED4: **1951**, psychics and science fiction

**77. thrombose**

OED4: **1910**, tr. v. f. *thrombosis* n.; tr. v.: pathology: to cause thrombosis in (a blood vessel); **1938**, intr. v.: to become occupied by a thrombus (= a small tumour occasioned by the escape of blood from a vein into the adjacent cellular tissue)

**78. transvaluate**

MW's 11<sup>th</sup> CD: **1912**, tr. v. f. *transvaluation* n.; to re-evaluate especially on a basis that repudiates accepted standards (= transvalue)

**79. upkeep**

OED4: **1926**, tr. v. f. *upkeeping* n.; to keep up, in various senses; esp. to maintain in good order

**TYPE III: verb from adjective (21 items)**

**1. bonderize**

MW'sUD: tr. v. f. *Bonderized* adj.; a trademark (1932), to coat (steel) with a patented phosphate solution for protection against corrosion; OED4: **1938**; engineering

**2. cairn**

OED4: **1937**, tr. v. f. *cairmed* adj.; to mark with a cairn

**3. cathect**

MW's 11<sup>th</sup> CD: **1925**, tr. v. f. *cathectic* adj.; to invest with mental or emotional energy; OED4: **1936**, psychoanalysis; to charge with mental energy; to give (ideas, etc.) an emotional loading

**4. computerize**

OED4: **1960**, tr. v. f. *computerized* adj., to prepare for operation by, or to operate by means of, a computer; to install a computer or computers in (an office, etc.)

**5. decongest**

D.com: **1955-60**, intr. v. f. *decongestant* adj.; (pharmacology: of or pertaining to a substance that relieves mucus congestion of the upper respiratory tract), to diminish or end the congestion of

**6. disproportionat**

OED4: **1934**, intr. v. f. *disproportionated* adj.; chemistry: to undergo disproportionation

**7. fetishize**

OED4: **1934**, tr. v. f. *fetishized* adj.; to make a fetish of; to pay undue respect to, to overvalue

**8. floss**

OED4: **1938**, intr. v. f. *flossy* adj. (resembling floss or floss-silk; floss-like; also fig. saucy, impertinent, 'fresh'; fancy, showy); slang (chiefly U.S.), in later use chiefly in African-American usage; to flirt; to show off, esp. (in later use) by flaunting one's wealth, possessions, etc.

**9. french fry**

MW'sUD: tr. v. f. *french fried* adj., often capitalized 1st F; 1 to fry strips of (potato) in deep fat until brown; 2 to cook by frying in deep fat until brown; Americanism; MW's 11<sup>th</sup> CD: after **1918**

#### 10. **gangle**

OED4: **1942**, intr. v. f. *gangling* vbl. adj.; slang: to walk or move with or as if with a loose-jointed gait: move like a gangling person

#### 11. **nodulate**<sup>1</sup>

MW'sUD: tr. / intr. v.; prob. BF f. *nodulated* adj.; botany: to cause the formation of nodules on or in; intransitive verb: to form or multiply in nodules (used of symbiotic nitrogen-fixing bacteria); OED4: **1939**, tr. v.: to produce root nodules on

#### 12. **nodulate**<sup>2</sup>

OED4: **1956**, intr. v. f. *nodulated* adj.; of a plant: to undergo nodulation, botany

#### 13. **norm**

OED4: **1959**, tr. verb f. adj. *normed*, mathematics: to define a norm on (a space)

#### 14. **quantitate**

MW's 11<sup>th</sup> CD: **1927**, tr. v. f. *quantitative* adj.; 1 to measure or estimate the quantity of; especially to measure or determine precisely; 2 to express in quantitative terms; OED4: **1960**, medicine, f. *quantity* by derivation, tr. v., to ascertain the quantity or extent of

#### 15. **rort**

OED4: **1931**, intr. v. f. *rorty* adj.; slang: to shout, complain loudly; to shout abuse

#### 16. **scrag**

OED4: **1937**, v., perhaps BF from *scraggy*<sup>1</sup> adj.; slang: with ref. to the resultant appearance; to scrape or drag (one's hair) back or up; rare

#### 17. **sozzle**

OED4: **1937**, intr. v. f. *sozzled* ppl. adj.; slang: to imbibe intoxicating drink

#### 18. **stuff**

OED4: **1927**, intr. v. f. *stuffy* adj.; U.K. slang: to confine oneself in a stuffy atmosphere; to remain cooped up; to 'frowst'

#### 19. **stupend**

OED4: **1904**, tr. v. f. *stupendous* adj.; to amaze, dumbfound (G. B. Shaw's word)

#### 20. **unweight**

OED4: **1930**, tr. v. f. *unweighted* ppl. adj.; to shift the weight from (a ski, etc.); to cease pressing heavily on

#### 21. **zonk**

OED4: **1950**, tr. / intr. v. f. *zonked* adj., tr. v.: to hit, strike, or knock; intr. v.: to hit, to lose consciousness, to die; Americanism

### TYPE IV: noun from adjective (56 items)

#### 1. **adiabat**

MW'sUD: n. f. *adiabatic* adj.; a curve or line plotted using coordinates selected to represent the pressure and volume or the temperature and entropy of matter during an adiabatic process; OED4: **1945**, Physics

#### 2. **allochthon**

MW'sUD: n. f. *allochthonous* adj.; a geological formation not formed in the region where found and moved to its present location by tectonic forces; OED4: **1942**, Geology

#### 3. **apochromat**

MW'sUD: n. f. German *apochromatisch*, *apochromatic* adj.; an apochromatic lens; OED4: **1901**; D.com: optics

#### 4. **apomict**

MW's 11<sup>th</sup> CD: **1938**, n. f. *apomictic* adj.; one produced or reproducing by apomixes (asexual reproduction, of plants); OED4: biology

#### 5. **archosaur**

OED4: **1933**, n. f. *archosaurian* adj.; palaeontology and zoology: an archosaurian reptile (living or extinct)

#### 6. **bicone**

MW'sUD: n., prob. BF f. *biconical* adj.; an object in the form of two cones with their bases placed together; specifically: a bead having this form found among Sumerian and early Egyptian jewellery; OED4: **1928**

#### 7. **biface**

MW'sUD: n., prob. BF f. *bifacial* adj.; archaeology: a stone tool usually of flint made from a core flattened on both sides; OED4: **1934**

#### 8. **bizone**

MW'sUD: n., prob. BF f. *bizonal* adj.; a *bizonal area*; specifically: a zone governed or administered by two powers acting together; MW's 11<sup>th</sup> CD: after **1946**

#### 9. **clast**

MW's CD: **1952**, noun-combining form f. *clastic* adj.; meaning of the noun: fragment of rock; MW's UD: noun-combining form functioning as the second element of a compound noun referring to rock composed of fragmental material (of a specified type), e.g. *pyroclast*, *cataclast*

**10. crystalloblast**

MW'sUD: n. f. *crystalloblastic* adj.; one of the components of a crystalloblastic rock or rock mass; OED: after 1913

**11. cryptozoa**

OED4: 1911, pl. n. f. *cryptozoic* adj.; zoology: the group of cryptozoic animals

**12. dichromat**

MW's 11<sup>th</sup> CD: c. 1909, n. f. *dichromatic* adj., one affected with dichromatism; OED4: also dichromate, ophthalmology

**13. didact**

MW's CD: 1954, n. f. *didactic* adj.; a didactic person; one overinclined to instruct others

**14. dill**

OED4: 1941, n. f. *dilly* adj.; also *dil*; Australian and New Zealand slang: a fool or simpleton; spec. one who is duped by a trickster

**15. dip**

MW's 11<sup>th</sup> CD: 1932, n. f. *dippy* adj.; a stupid or unsophisticated person; OED4: U.S. slang

**16. epistasis**

OED4: 1917, n. f. *epistatic* adj.; genetics: the expression of one hereditary character to the exclusion of another when the two are controlled by alleles of different genes; also more widely, any interaction of non-allelic genes

**17. eustasy**

OED4: 1946, n., anglicized BF f. *eustatic* adj., physical geography: a uniform change of sea-level throughout the world

**18. exurb**

OED4: 1955, n. f. *exurban* adj.; orig. U.S.: a district outside a city or town; spec. a prosperous area situated beyond the suburbs of a city

**19. ferromagnet**

OED4: 1941, n. f. *ferromagnetic* adj.; after magnet and magnetic, physics: ferromagnetic body or substance

**20. frivol**

OED4: 1903, n. f. *frivolous* adj.; colloquial: something frivolous, (an instance of) frivolity; a frivolous or light-hearted event, etc. (esp. a literary or cinematographic production); also, a frivolous person

**21. funk**

MW's CD: 1959, n. f. *funky* adj.; 1 music that combines traditional forms of black music (as blues, gospel, or soul) and is characterized by a strong backbeat; 2 the quality or state of being funky

**22. gnotobiot**

OED4: after 1949, n. f. *gnotobiotic* adj.; biology: (of an organism (esp. a higher animal) or its environment) artificially rendered devoid of bacteria and other organisms which would normally be present as parasites, commensals, symbionts, etc., or having only a few known organisms of this kind present); a gnotobiotic animal

**23. homœostat**

OED4: 1948, n. f. *homœostatic* adj.; after words like thermostat, also homeo-; a homœostatic apparatus or system; something that adapts itself (within limits) to changes in its environment in such a way as to preserve a state of internal stability

**24. hypostasis**

OED4: 1917, n. f. *hypostatic* adj.; genetics: the inhibition of the expression of one gene by the action of another non-allelic (epistatic) gene

**25. interfluve**

OED4: 1902, n. f. *interfluvial* adj.; a region lying between (the valleys of) adjacent watercourses, esp. one between the valleys of a dissected upland

**26. intersex**

OED4: 1910, n. f. *intersexual* adj.; biology: an abnormal form or individual having characteristics of both sexes; the condition of being of this type

**27. lair**

OED4: 1935, n. f. *lairy*<sup>2</sup> adj.; Australian slang; also laire; a flashily dressed man, one who 'shows off'

**28. lysogen**

OED4: 1958, n. f. *lysogenic* adj.; microbiology: a lysogenic bacterium, phage, or prophage

**29. meroplankton**

OED4: 1909, n. f. *meroplanktonic* adj.; biology: a collective term for aquatic organisms that are meroplanktonic

**30. mesotroph**

MW'sUD: n. f. *mesotrophic* adj.; a mesotrophic organism; MW's 11<sup>th</sup> CD: after 1911, Biology

**31. metatroph**

MW'sUD: n. f. *metatrophic* adj.; a metatrophic organism; OED4: after 1930, Biology

**32. narcolept**

OED4: 1957, n. f. *narcoleptic* adj.; a narcoleptic person (one suffering from narcolepsy - a nervous disease characterized by short and frequently recurring attacks of somnolence)

**33. orbicule**

OED4: **1931**, n. f. *orbicular* adj.; petrology: A spheroidal inclusion, esp. one composed of a number of concentric layers

**34. osmophore**

OED4: **1919**, n. f. *osmophoric* adj.; chemistry: a chemical group whose presence in the molecules of a substance causes it to have a smell

**35. parafovea**

OED4: **1941**, n. f. *parafoveal* adj.; also with hyphen; anatomy: an annular area of the retina immediately surrounding the fovea centralis

**36. paramagnet**

OED4: **1909**, n. f. *paramagnetic* adj., after magnet and magnetic, a paramagnetic body or substance

**37. pluton**

MW's 11<sup>th</sup> CD: **1936**, n. f. *plutonic* adj.; a typically large body of intrusive igneous rock

OED4: Geology

**38. polychromasia**

OED4: **1909**, n. f. Modern Latin *polychromatic* adj.; medicine: = polychromatophilia

**39. polygene**

OED4: **1941**, n. f. *polygenic*<sup>3</sup> adj.; genetics: a gene whose individual effect on the phenotype of a single organism is too small to be observed, but which can act together with other, non-allelic polygenes to produce observable phenotypic variation in a quantitative character

**40. polytrope**

OED4: **1926**, n. f. *polytropic* adj.; physics and astronomy: a polytropic body of gas

**41. polyunsaturate**

D.com: **1945–50**, n. f. *polyunsaturated* adj.; chemistry: a polyunsaturated fat or fatty acid

**42. priss**

OED4: **1923**, n. f. *prissy* adj., U.S. colloquial: one who is prissy; a prim girl; an effeminate man, a 'pansy'.

**43. prototroph**

MW's 11<sup>th</sup> CD: **1946**, n. f. *prototrophic* adj.; a prototrophic individual; OED4: genetics

**44. Rhæto-Roman**

OED4: **1931**, adj. and n. f. *Rhæto-Romance* adj. and n.; also Rhe-; 1 adj. = Rhæto-Romance adj.; 2 n.: a speaker of Rhæto-Romance

**45. rort**

MW'sUD: n. f. *rorty* adj.; Australian: a fraudulent scheme, trick; OED4: **1936**, slang

**46. sardony**

OED4: **1935**, n. f. *sardonic* adj.; perhaps after *irony*, = sardonicism, noun

**47. slant-eye**

MW'sUD: n. f. *slant-eyed* adj.; a person with slanting eyes; especially: one of Mongoloid ancestry usually taken to be offensive; OED: **1929**, slang (orig. U.S.), a slant-eyed person, spec. an Asian

**48. sleaze**

MW's CD: **1954**, n. f. *sleazy* adj.; 1 sleazy quality, appearance, or behaviour; also: sleazy material; 2 a sleazy person; OED4: slang: 1 squalor; sordidness, sleaziness; dilapidation; (something of) inferior quality or low moral standards; 2 a person of low moral standards

**49. smarm**

MW's 11<sup>th</sup> CD: **1937**, n. f. *smarmy* adj.; smarmy language or behaviour; OED4: colloquial; an unctuous bearing; fulsome flattery; flattering or toadying behaviour

**50. spasmogen**

OED4: **1952**, n. f. *spasmogenic* adj.; pharmacology: a spasmogenic drug (promoting the contraction of smooth muscle)

**51. sternutator**

OED4: **1922**, n. f. *sternutatory* adj.; a substance that causes nasal irritation; esp. a poison gas that causes irritation of the nose and eyes, pain in the chest, and nausea; D.com: chemical warfare

**52. syntone**

OED4: **1940**, n. f. *syntonic* adj.; psychiatry: a person having a syntonic temperament

**53. trichromat**

MW's 11<sup>th</sup> CD: **1929**, n. f. *trichromatic* adj.; a person with trichromatism; OED4: **1906**, ophthalmology

**54. trivia**

MW's 11<sup>th</sup> CD: **1920**, n. (pl.) f. Latin *trivialis* adj.; unimportant matters: trivial facts or details; also singular in construction: a quizzing game involving obscure facts

**55. ultramicroscope**

MW's 11<sup>th</sup> CD: **1906**, n. f. *ultramicroscopic* adj.; an apparatus for making visible by scattered light particles too small to be perceived by an ordinary microscope

**56. wack**

OED4: 1938, n., prob. BF f. *wacky* adj.; slang (orig. U.S.), also whack: an eccentric or crazy person; a madman, a crackpot.

**TYPE V: noun from another noun which is believed to be its derivative (24 items)**

**1. aerobat**

OED4: 1929, n. f. *aerobatics* n.; one who performs aerobatics

**2. agoraphobe**

OED4: 1955, n. f. *agoraphobia* n.; a person who suffers from agoraphobia

**3. bloop**

MW's 11<sup>th</sup> CD: 1947, n. f. *blooper* n. (= a fly ball hit barely beyond a baseball infield); OED4: baseball. Used attrib. of a ball lobbed over the infield so as to come down just beyond their reach, or of a run or runs scored by hitting such a ball (as bloop single, etc.)

**4. claustrophobe**

MW's UD: n. f. *claustrophobia* n.; one having claustrophobia; OED4: 1911 (additions 1997)

**5. cryoscope**

MW's UD: n. f. *cryoscopy* n.; an instrument for determining freezing points; MW's 11<sup>th</sup> CD: 1920

**6. deuteranope**

MW's UD: n. f. *deuteranopia* n.; an individual affected with deuteranopia (blindness to green, regarded as the second primary colour); MW's 11<sup>th</sup> CD: 1902; OED4: ophthalmology

**7. grievant**

D.com: 1955-60, n. f. *grievance* n.; (1 a wrong considered as grounds for complaint, or something believed to cause distress; 2 a complaint or resentment, as against an unjust or unfair act: to have a grievance against someone); a person who submits a complaint for arbitration

**8. kine**

OED4: 1952, n. f. *kine(sics)* n.; linguistics: an isolable element of body movement or gesture made in non-vocal communication

**9. leg-pull**

MW's UD: n. f. *leg-pulling* n.; a deception or hoax usually of a humorous character

D.com: 1915-20

**10. morph**

MW's 11<sup>th</sup> CD: 1947, n. f. *morpheme* n.; 1 a: allomorph; b: a distinctive collocation of phones (as a portmanteau form) that serves as the realization of more than one morpheme in a context (as the French *du* for the sequence of *de* and *le*); 2 a: a local population of a species that consists of interbreeding organisms and is distinguishable from other populations by morphology or behaviour though capable of interbreeding with them; b: a phenotypic variant of a species

**11. mythomane**

D.com: 1950-55, noun f. *mythomania* n.; a person with a strong or irresistible propensity for fantasizing, lying, or exaggerating

**12. plasmal**

MW's UD: n., prob. BF f. *plasmalogen* n.; a substance consisting of one or more aldehydes of the type of those related to palmitic acid and stearic acid obtained in the form of an acetal (as by treatment of a plasmalogen with alkali); OED4: 1925, biochemistry

**13. polymerizate**

MW's UD: n., prob. BF f. *polymerization* n.; chemistry: a product of polymerization; OED4: 1931

**14. protanope**

MW's UD: n. f. *protanopia* n.; ophthalmology: an individual affected with protanopia (a form of dichromatic colour-blindness marked by insensitivity to red and an inability to distinguish between red, yellow, and green hues); OED4: 1908, ophthalmology

**15. pseudoallele**

OED4: 1948, n. f. *pseudoallelism* n.; genetics: each of two or more mutations that resemble alleles of a single gene functionally, in affecting the same process or property, but differ structurally, in that crossing-over is possible between them

**16. radiochemist**

OED4: 1952, n. f. *radiochemistry* n., a specialist in radiochemistry

**17. retardate**

D.com: 1955-60, n. f. *retardation* n.; someone who is retarded in some way, as educationally or mentally

**18. scintiscan**

OED4: 1960, n. f. *scintiscanner* n.; an autoradiograph obtained with a scintiscanner, medicine

**19. schizophrene**

MW's 11<sup>th</sup> CD: **1925**, n., prob. BF f. New Latin *schizophrenia* n.; one affected with schizophrenia (schizophrenic); OED4: psychology

**20. schizothyme**

MW's UD: n. prob. BF f. New Latin *schizothymia* n.; an individual exhibiting or characterized by schizothymia; OED4: **1936**, psychology: a person who is introverted and imaginative, and so regarded as tending to schizophrenia rather than to manic-depressive illness

**21. strip-tease**

OED4: **1936**, action n. f. *strip-teaser* agent n.; colloquial (orig. U.S.), also strip tease, striptease; a kind of entertainment in which a female (occas. a male) performer undresses gradually in a tantalizingly erotic fashion before an audience, usu. to music; an instance of this

**22. tautomer**

OED4: **1905**, n. f. *tautomerism* n. (the ability of certain organic compounds to react in isomeric structures that differ from each other in the position of a hydrogen atom and a double bond.); chemistry: a compound that exhibits tautomerism

**23. taxon**

OED4: **1929**, n. f. *taxonomy* n.; a taxonomic category or group, such as a phylum, order, family, genus, or species

**24. vulcanizate:**

MW's 11<sup>th</sup> CD: **1926**, n. f. *vulcanization* n.; a vulcanized product; OED4: **1942**; f. *vulcanize* (v.) after *filtrate*, *precipitate*, etc.

**TYPE VI: adjective from abstract noun (17 items)**

**1. aerobatic**

MW'sUD: adj. f. *aerobatics* n.; of or relating to aerobatics, marked by, engaging in, or suitable for aerobatics (flying performed for an audience on the ground); OED4: **1918**

**2. argentaffin**

MW'sUD: adj., prob. BF f. *argentaffinity* n.; 1 depositing reduced silver from ammoniated silver hydroxide solutions used of certain cell granules containing phenols or polyamines; 2 of, relating to, or being a cell type of the gastrointestinal tract that is postulated to have a role in the production of intrinsic factor; OED4: **1926**, histology

**3. autoimmune**

MW's CD: **1952**, adj. f. *autoimmunization* n.; of, relating to, or caused by antibodies or lymphocytes that attack molecules, cells, or tissues of the organism producing them; D.com: Immunology

**4. avionic**

MW'sUD: adj. f. *avionics* n. (a blend of *aviation* and *electronics*); of, for, or relating to the field of avionics; OED4: **1949**

**5. biometric**

MW'sUD: adj. f. *biometrics* n.; of, relating to, or concerned with biometrics; OED4: **1901**

**6. cloze**

MW's CD: **1953**, adj. f. *closure* n.; of, relating to, or being a test of reading comprehension that involves having the person being tested supply words which have been systematically deleted from a text; D.com: psychology

**7. co-ordinate**

OED4: **1927**, adj. f. *co-ordination*<sup>5</sup> n.; chemistry: designating a type of covalent bond in which one of the atoms, ions, or molecules forming the bond is regarded as providing both the shared electrons

**8. cybernetic**

OED4: **1951**, adj. f. *cybernetics* n.; of, relating to, or involving cybernetics

**9. dermatoglyphic**

MW's UD: adj. f. *dermatoglyphics* n.; of or relating to dermatoglyphics; MW's 11<sup>th</sup> CD: **1926**

**10. hyperthyroid**

MW's 11<sup>th</sup> CD: **1916**, adj. f. *hyperthyroidism* n.; of, relating to, or affected with hyperthyroidism; OED4: medicine

**11. hypoparathyroid**

MW's UD: adj. f. *hypoparathyroidism* n.; of or affected by hypoparathyroidism (deficiency of parathyroid hormone in the body; also: the resultant abnormal state marked by low serum calcium and a tendency to chronic tetany); OED4: **1910**, medicine

**12. logistic**

OED4: **1934**, adj. f. *logistics* n.; of or pertaining to logistics

**13. paratroop**

MW's UD: adj. f. *paratroops* n.; of, relating to, or engaged in by paratroops e.g. paratroop action; OED4: **1941**

**14. premune**

MW's 11<sup>th</sup> CD: **1948**, adj. f. *premunition* n.; exhibiting premonition; D.com: immunology

### 15. superconductive

MW's UD: adj. f. *superconductivity* n.; possessing no electrical resistivity; employing a substance in this state; OED4: 1913, physics

### 16. surreal

MW's 11<sup>th</sup> CD: 1937, adj. f. *surrealism* n.; 1 marked by the intense irrational reality of a dream; also: unbelievable, fantastic; 2 surrealistic; OED4: adj. and noun

### 17. vacuolating

OED4: 1960, adj. f. *vacuolation* n.; medicine: vacuolating agent or vacuolating virus: a papovavirus, orig. obtained from rhesus monkey kidney tissue, which is capable of causing tumours in animals and animal tissue cultures

## Type VII: adjective from agent noun

There are no items of this type for the given period

## Type VIII: prefix back-formations (8 items)

### 1. clitic

MW's UD: n. / adj. f. *enclitic* / *proclitic* n. / adj. by subtracting the prefix *en-* / *pro-*; a word that is treated in pronunciation as forming a part of a neighbouring word and that is often unaccented or contracted; OED4: 1946, grammar

### 2. dentulous

MW's 11<sup>th</sup> CD: 1926, adj. f. *edentulous* adj. (= toothless) by subtracting the prefix *e-*; having teeth

### 3. ept

OED4: 1938, adj. f. *inept* adj. by subtracting the prefix *in-*; used as a deliberate antonym of 'inept': adroit, appropriate, effective

### 4. gruntle

OED4: 1928, n. / adj. f. *disgruntle* v. (= to make ill-humoured or discontented) by subtracting the prefix *dis-*, to put in a good humour; OED4: *grunted* f. *disgruntled*, 1938, pleased, satisfied, contented.

### 5. lapsarian

OED4: 1928, n. / adj. f. *infralapsarian* n. / adj. by subtracting the prefix *infra-*; one who believes in the doctrine of the fall of man from innocence; theology

### 6. opsin

OED4: 1951, n. f. *rhodopsin* n. (rhodo- = combining form, "rose"); biochemistry: a protein liberated from rhodopsin by the action of light

### 7. sorb

MW's 11<sup>th</sup> CD: 1909, tr. v. f. *absorb* & *adsorb* v. by subtracting the prefix *ab-* / *ad-*; to take up and hold by either adsorption or absorption; OED4: 1909, physical chemistry, back-formation from *sorption*, after *absorb*, *absorption* (= Type II), a) tr. verb: to collect by sorption; b) intr. v.: = *pass*, 1970

### 8. sorption

MW's 11<sup>th</sup> CD: 1909, n. f. *absorption* & *adsorption* n. by subtracting the prefix *ab-/ad-*; the process of sorbing, the state of being sorbed; OED4: physical chemistry: extracted from *absorption* and *adsorption*, the combined or undifferentiated action of absorption and adsorption

## Type IX: inflectional back-formations (4 items)

### 1. bicep

MW's 11<sup>th</sup> CD: 1939, sg. n. f. *biceps* pl. n.; a muscle having two heads; a muscle of the front of the upper arm; Online ED: 1955, false sg. of biceps

### 2. gladiola

MW's 11<sup>th</sup> CD: 1926, sg. n. f. *gladiolus* n. (taken as a plural); a plant

### 3. kudo

MW's 11<sup>th</sup> CD: 1926, sg. n. f. *kudos* n. (erroneously taken as a plural); 1 award, honour; 2 compliment, praise; OED4: 1941, slang (orig. university) and colloquial

### 4. sciapod

OED4: 1915, n. f. *Sciapodes* pl. n.; also *skiapod*; a monster of medieval iconography having the form of a man with a single large foot; one of the Sciapodes

## APPENDIX III

### New sample of back-formations from the second half of the 20th and the beginning of the 21<sup>st</sup> century (after 1961) (229 items)

#### TYPE I: verb from agent / instrument noun (31 items)

##### 1. **ass-lick**

OED4: 1970, intr. v. f. *ass-licker* n. (D.com: a person who curries favour; rude and derogatory); *slang*, to act as an ass-licker

##### 2. **blow-dry**

MW's CD: 1966, MW's UD: tr. / intr. v. f. *blow-dryer* n.; tr. v.: to dry and usually style (hair) with a blow-dryer; intr. v.: to dry hair with a blow-dryer

##### 3. **buff**

MW's UD: intr. v. f. *buffer* n. (a 'memory' device in a computer; a buffer memory); to act as a buffer in preventing contact or deadening the shock of contact; OED4: after 1962

##### 4. **comede**

Ayto: 1989, v. f. *comedian* n.; informal, jocular; to tell jokes to an audience; be a comedian

##### 5. **daysail**

D.com: 1960-65, intr. v. f. *day sailer* n.

(a small sailboat without sleeping accommodations, suitable for short trips); to go boating in a day sailer

##### 6. **deal**

Ayto: 1988, v. f. *dealer* n.; to be dealer in something, sell

##### 7. **front-load**

OED4: 1977, trans. v. f. *front-loader* n. (a machine, esp. a washing-machine, designed to be loaded from the front, as distinct from one loaded from the top, etc.); U.S.: to concentrate a load at the front of (a vehicle)

##### 8. **helicopt**

OED4: 1961, tr. / intr. v. f. *helicopter* n.; to fly with or as with a helicopter; to transport by helicopter

##### 9. **hot-dog**

OED4: 1963, intr. v. f. *hot-dogger* n. (surfing slang: a surfer who rides a 'hot dog', a particular kind of surf-board); to ride such a board

##### 10. **incent**

OED4: 1977, tr. v. f. *incentive* n., orig. and chiefly N. Amer.: to provide (a person) with an incentive; to encourage, incite, inspire; MW's CD: 1981

##### 11. **jackroll**

MW's UD: after 1990, tr. v. f. *jackroller* n. (one who robs a drunken or sleeping person) (South African – a member of a criminal gang in Soweto); to act as a jackroller

##### 12. **lase**

OED4: 1962, intr. v. f. *laser* n.; of a substance, or an atom or molecule: to undergo the physical processes (of excitation and stimulated emission) employed in the laser; to function as the working substance of a laser; of a device: to operate as a laser

##### 13. **lime**

OED4: 1973, intr. v. f. *limer* n. (the W. Indies: a person who hangs about the streets); to hang about the streets

##### 14. **mase**

OED4: 1962, intr. v. f. *maser* n. (a device for amplifying electromagnetic waves by stimulated emission of radiation); to lase, esp. in the microwave part of the spectrum

##### 15. **mind-blow**

OED4: 1970, tr. v. f. *mind-blower* n. (slang, something that blows one's mind); of an idea, especially a shocking one: to blow one's mind

##### 16. **overachieve**

OED4: 1967, v. f. *over-achiever*, n.; psychology: to achieve more, as a result of personality factors; to achieve more than is expected

##### 17. **play-make**

OED4: 1976, intr. v. f. *play-maker* n.; sport (chiefly U.S.): to lead or engage in attacking play in a team game, esp. basketball

##### 18. **roller-coast**

OED4: 1973, tr. / intr. v. f. *roller-coaster* n. (a kind of switchback railway at an amusement park; also transferred, fig., and attrib.); to ride a roller-coaster

**19. shake-dance**

OED4: after **1968**, intr. v. f. *shake-dancer* n.; slang: to act as a shake-dancer, to shake bare or almost bare breasts to music

**20. skirt-chase**

OED4: **1981**, intr. v. f. *skirt-chaser* n.; slang: to pursue women with amorous attentions

**21. strike-break**

OED4: **1961**, intr. v. f. *strike-breaker* n.; to consent to work for an employer whose workmen are on strike, thus contributing to the defeat of the strike

**22. supply-teach**

OED4: after **1968**, intr. v. f. *supply teacher* n. (a teacher supplied by the education authority to fill a temporary vacancy; hence, one who is regularly employed to do this); to work as a supply teacher

**23. Tase**

OED4: **1991**, tr. v. f. *Taser* n.; orig. U.S., also with lower case initial; to use a Taser (a weapon which fires barbs attached by wires to batteries, and causes temporary paralysis) on (a person); to subdue or incapacitate using a Taser

**24. teleprint**

OED4: **1971**, tr. v. f. *teleprinter*; to send or print (a message, etc.) by teleprinter

**25. topline**

Ayto: **1988**, v. f. *topliner* n.; to appear as the principal performer

**26. train-spot**

OED: **1974**, intr. v. f. *train-spotter* n. / *train-spotting* n.; to observe trains and record railway locomotive numbers as a hobby

**27. trend-set**

OED4: **1961**, intr. v. f. *trend-setter* n. (one who or that which establishes trends in dress, thought, etc.); to act as a trend-setter

**28. turbocharge**

OED4: **1981**, tr. v. f. *turbocharger* n. (engineering: a supercharger driven by a turbine powered by the engine's exhaust gases); to equip with a turbocharger

**29. vocode**

OED4: **1981**, tr. v. f. *vocoder* n. (any of various devices or systems for analysing speech or other sounds to obtain information that may be transmitted in a much reduced frequency band and used to reconstruct the sounds or synthesize new ones); to transform by means of a vocoder

**30. volumize**

D.com 21L: **1991**, tr. v. f. *volumizer* n. (a cosmetic substance applied to the hair to increase its volume, 1989); Ayto: to add volume to, as the hair; to enhance the thickness or body of

**31. windsurf**

OED4: **1969**, intr. v. f. *Windsurfer* n. (the proprietary name in the U.S. of a kind of sailboard); orig. U.S.: to ride a sailboard; to sailboard

**TYPE II: verb from action noun (126 items)**

**1. access**

OED4: **1962**, tr. v. f. *accession* n.; to get at; to gain access to (data, etc., held in a computer or computer-based system, or the system itself)

**2. accreditate**

Ayto: **1989**, tr. v. f. *accreditation* n.; of a school, course, etc.: to certify a school as meeting standards set by external assessors or regulators

**3. adenylate**

OED4: **1972**, tr. v. f. *adenylation* n.; biochemistry: to introduce an adenyl moiety into

**4. age-date**

OED4: **1984**, tr. v. f. *age-dating* n.; geology: to establish the age of geological deposits, archaeological remains, etc., by means of scientific examination of samples of them

**5. alluviate**

OED4: **1968**, tr. v. f. *alluviation* n.; to cover or fill with alluvium (a deposit of earth, sand, and other transported matter left by water flowing over land not permanently submerged; chiefly applied to the deposits formed in river valleys and deltas)

**6. ass-kiss**

OED4: **1974**, tr. v. f. *ass-kissing* n.; MW'sUD: vulgar: to flatter, truckle to

**7. back-calculate**

Miller (2006): **1988**, v. f. *back-calculation* n. (resolving a problem backwards from the result to the start); to perform back-calculation

**8. back-talk**

OED4: **1962**, tr. / intr. v., prob.BF f. *back-talking* n., chiefly U.S., colloquial, to talk back to a person, esp. in an insolent manner

**9. batch-process**

OED4: **1964**, tr. v. f. *batch processing* n.; computing: to process previously collected batches of data

**10. bibliograph**

OED4: **1961**, tr. v. f. *bibliography* n.; 1 to enter in a bibliography; 2 to provide (as a book) with a bibliography; 3 to compile a bibliography of sth.

**11. biomagnify**

D.com: **1970-75**, intr. v. f. *biomagnification* n.; to undergo biological magnification

**12. blast-freeze**

OED4: **1965**, tr. v. f. *blast-freezing* n.; to freeze foodstuffs, by means of a rapid current of chilled air

**13. break-dance**

MW's CD 11<sup>th</sup>: after 1982, intr. v. f. *break-dancing* n. (originally U.S.: dancing in which solo dancers perform acrobatics that involve touching various parts of the body (as the back or head) to the ground); to dance in that way

**14. carjack**

OED4: **1991**, tr. v. f. *car-jacking* n.; to steal or commandeer an occupied car by threatening the driver with violence

**15. computer-generate**

Adams (2001), probably the **1990s**, tr. v. f. *computer-generating* n.; computing: to create sounds or visuals (images, music, etc.) with the aid of computer software

**16. concord**

OED4: **1969**, tr. v. f. *concordance* n. (an alphabetical arrangement of the principal words contained in a book, with citations of the passages in which they occur); to rearrange the words of a text in the form of a concordance

**17. contracept**

D.com: **1965-70**, tr. v. f. *contraception* n.; 1 to prevent the conception of (offspring); 2 to prevent pregnancy or impregnation in; provide with the means for birth control

**18. cross-dress**

OED4: **1966**, intr. v. f. *cross-dressing* n.; to dress in clothes of the opposite sex, as a transvestite

**19. cybernate**

D.com: **1960-65**, tr. v. f. *cybernation* n. (the use of computers to control automatic processes, esp. in manufacturing); to control by cybernation

**20. decondense**

OED4: **1965**, intr. / tr. v. f. *decondensation* n. (cytology: a process in which chromatin becomes less dense and compact; the degree of looseness of texture that results); to (cause to) undergo decondensation

**21. deconstruct**

OED4: **1973**, tr. v. f. *deconstruction* n.; 1 to undo the construction of, to take to pieces; 2 Philosophy and literary theory: to subject to deconstruction; to analyse and reinterpret in accordance with the 'strategy' associated with Jacques Derrida.

**22. decriminalize**

OED4: **1963**, tr. v. f. *decriminalization* n., 1 to reform (an offender or one with criminal tendencies) through psychiatric treatment (rare); 2 to reclassify (an activity) so that it is no longer considered criminal in law; spec. to legalize (a narcotic drug, its possession, or use)

**23. demerge**

OED4: **1980**, intr. / tr. v. f. *demerger* n.; to dissolve a merger between business concerns; to separate one or more firms or trading companies from a large group

**24. derecognize**

OED4: **1961**, tr. v. f. *derecognition* n.; esp. politics: to withdraw recognition by one country, government, etc., from (another country, etc.)

**25. deregulate**

OED4: **1964**, tr. v. g. *deregulation* n.; to free from regulation, esp. tariff restriction; to decontrol

**26. direct-dial**

OED4: **1969**, tr. v. f. *direct-dialing* n.; telephony: to dial a long-distance number direct, without the intervention of an operator, by using national and area codes before the local number

**27. disinform**

D.com: **1975-80**, tr. v. f. *disinformation* n.; to give or supply disinformation to

**28. divisionalize**

OED4: **1982**, tr. v. f. *divisionalization* n.; to organize (a company, etc.) on a divisional basis

**29. downwell**

OED4: **1967**, intr. v. f. *downwelling* n.; of seawater or other fluid: to sink in a downward current

**30. drop-ship**

MW's.com: **1999**, tr. v. f. *drop-shipment* n., to ship (goods) from a manufacturer or wholesaler directly to a customer instead of to the retailer who took the order

**31. drownproof**

D.com: **1975-80**, tr. v. f. *drownproofing* n. (a survival technique, for swimmers or nonswimmers, in which the body is allowed to float vertically in the water, with the head submerged, the lungs filled with air, and the arms and legs relaxed, the head being raised to breathe every ten seconds or so); to teach (a person) the technique of drownproofing

**32. electrophoresis**

D.com: **1965-70**, tr. v. f. *electrophoresis* n. (the movement of suspended particles through a medium (as paper or gel) under the action of an electromotive force applied to electrodes in contact with the suspension); physical chemistry: to subject to electrophoresis

**33. enculturate**

MW's UD: tr. v. f. *enculturation* n.; to modify or condition by enculturation; OED4: probably the **1970s** of the 20<sup>th</sup> century

**34. endocytose**

D.com: **1970-75**, intr. v. f. *endocytosis* n. (the transport of solid matter or liquid into a cell by means of a coated vacuole or vesicle (distinguished from exocytosis); physiology: (of a cell) to take within by the process of endocytosis

**35. eutrophicate**

OED4: **1970**, tr. / intr. verb f. *eutrophication* n.; ecology: tr. v.: to render eutrophic; intr. v.: to undergo eutrophication; to become eutrophic

**36. evapotranspire**

OED4: **1967**, tr. v. f. *evapotranspiration* n.; geography: to lose (water) by evapotranspiration.

**37. event**

OED4: **1970**, tr. / intr. v. f. *eventing* n.; equestrianism (= horse riding): intr. v.: to take part in horse trials (one-, two-, or three-day events); trans. v.: to enter or ride (a horse) in horse trials

**38. exfiltrate**

OED4: **1980**, tr. / intr. v. f. *exfiltration* n.; military (orig. U.S.): to withdraw (troops, spies, etc.) from a dangerous position, usually surreptitiously

**39. exocytose**

D.com: **1970-75**, intr. v. f. *exocytosis* n. (a process of cellular secretion or excretion in which substances contained in vesicles are discharged from the cell by fusion of the vesicular membrane with the outer cell membrane); physiology: (of a cell) to extrude by means of exocytosis

**40. extrapose**

OED4: **1965**, tr. v. f. *extraposition* n.; grammar: tr. v.: to move (a word or group of words) outside or to the end of the clause or sentence to which it belongs while retaining the sense; occas. intr. v.: to bear extraposition, to be extrapposable

**41. featherbed**

OED4: **1962**, tr. v. f. *feather-bedding* n.; make sb. comfortable by favourable, esp. economic or financial treatment; specifically: to employ superfluous staff

**42. fine-tune**

OED4: **1969**, tr. v. f. *fine tuning* n.; also fine tune; orig. U.S.: to adjust (an instrument, measurement, etc.) very precisely

**43. finger-pick**

OED4: **1983**, tr. / intr. v. f. *finger-picking* n.; music: to play the guitar or a similar instrument by plucking the strings with the fingernails or with picks attached to the fingertips

**44. Finlandize**

D.com: **1970-75**, tr. v. f. *Finlandization* n. (1 the neutralization of a country in terms of its allegiance to the superpowers, in the way that the Soviet Union rendered Finland neutral and friendly without making it a satellite state or requiring that it adopt Communism; 2 such a neutral status pursued as a deliberate act of policy by a lesser power. 1965-70); to subject to Finlandization

**45. fly-tip**

OED4: **1985**, tr. v. f. *fly-tipping* n. (the unauthorized dumping of building rubble, household refuse, or other waste, esp. while in the process of transporting it); to dump (rubbish) by fly-tipping

**46. forthold**

Ayto: **1989**, v. f. *fort-holding* (a nominalization of the idiom *hold the fort*); to cope with problems in the absence of someone; hold the fort

**47. frequency-modulate**

OED4: **1962**, v. f. *frequency modulation* n. (electricity: modulation of a wave by variation of its frequency); transmit radio waves using frequency modulation

**48. gay-bash**

OED4: **1989**, tr. / intr. v. f. *gay-bashing* n.; slang (orig. and chiefly U.S.); attack homosexuals

**49. gentrify**

MW's CD: **1972**, tr. / intr. v. f. *gentrification* n.; tr. v.: to attempt or accomplish the gentrification of; intr. v.: to become gentrified; OED4: to renovate or convert (housing, esp. in an inner-city area) so that it conforms to middle-class taste

**50. grice**

OED4: **1984**, v. f. *gricing* n. (train-spotting); colloquial: to watch locomotives, to act as a gricer

**51. grit-blast**

OED4: **1962**, tr. v. f. *grit-blasting* n.; to use a stream of abrasive particles directed at a surface to clean it and roughen it

**52. hand-hold**

OED4: **1963**, v. f. *hand-holding* n.; to hold (an object) in the hand [1963 Movie Apr. 12/1 Newsreel photographers were often forced to \*hand-hold their cameras.]

**53. holograph**

OED4: **1968**, tr. v. f. *holography* n.; after *photograph*, *telegraph*; physics: to record as a hologram, to make a holographic record of

**54. hydroborate**

OED4: **1961**, tr. v. f. *hydroboration* n.; chemistry: to add a borane or other boron compound to (another compound) by hydroboration

**55. hydrofracture**

OED4: **1983**, tr. v. f. *hydrofracturing* n. (the process of fracturing subterranean rock by the injection of water into existing fissures at high pressure, usu. In order to facilitate the passage of some fluid (esp. oil or water) through an otherwise impermeable barrier); to fracture (rock) by this process; to subject (a fissure) to hydrofracturing

**56. immunosuppress**

D.com: **1965-70**, tr. / intr. v. f. *immunosuppression* n.; to suppress the normal immune response

**57. intergroup**

OED4: **1970**, v. f. *intergrouping* n.; to situate, distribute, carry on, etc., between groups

**58. interline**

OED4: **1975**, tr. / intr. v. f. *interlining* n.; a) tr. v.: of an airline, etc.: to provide (a passenger or freight) with an interline connection; b) intr. v.: to provide a connection with another carrier or service; hence, to operate an interline service integrated with other carriers; also of a passenger, etc.: to make use of such a service

**59. jaw-bone**

OED4: **1966**, v. f. *jawboning* n. (U.S. slang, name applied to a policy, first associated with the administration of President Lyndon Johnson (1963–1969), of urging management and union leaders to adopt a policy of restraint in wage and price negotiations); to attempt to persuade by using one's high office or position to apply pressure, as the President might in proposing price and wage controls to business and labour

**60. job-share**

OED4: **1981**, intr. v. f. *job sharing* n. (a working arrangement in which two or more people are employed on a part-time basis to perform a job which would otherwise have been available only to a person able to work full-time, and share the remuneration and other benefits); to be employed under such an arrangement

**61. kerb-crawl**

OED4: **1971**, intr. v. f. *kerb-crawling* n.; the action of driving a car, etc., slowly along a road close to the pavement and attempting to entice into it women, esp. prostitutes

**62. kite-fly**

OED4: **1965**, tr. / intr. v. f. *kite-flying* n. (slang: the raising of money (a) by persons collusively exchanging accommodation bills or cheques on different banks, in none of which they possess sufficient funds; (b) by one person transferring accounts between banks and creating an illusory balance against which he cashes cheques; (c) by a person passing forged, stolen, or unbacked cheques); to be involved in kite-flying

**63. layback**

OED4: **1972**, intr. v. f. *laybacking* n.; mountaineering: to climb a crack by means of a lay-back

**64. loco-spot**

OED4: **1968**, v. f. *loco-spotting* n.; to note the numbers (and sometimes other details) of locomotives seen

**65. mediocritize**

OED4: **1972**, tr. v. f. *mediocritization* n.; orig. U.S.: to render mediocre (mediocre = of middle degree, quality, or rank)

**66. metallide**

OED4: **1967**, tr. v. f. *metalliding* n.; (manufacturing: A form of electroplating in which the electrodes are immersed in a bath of molten fluoride salts from which metal ions diffuse into the cathode to form a surface layer whose composition varies continuously from the surface inwards); to deposit by this process

**67. methanate**

OED4: **1963**, tr. v. f. *methanation* n.; chemistry: to convert into methane, to subject to methanation

**68. metricate**

OED4: 1970, tr. / intr. v. f. *metrication* n.; a) intr. v.: to change to or adopt the metric system of weights and measures; b) trans. v.: to convert or adapt to the metric system

**69. microcode**

OED4: 1985, tr. v. f. *microcoding* n. (microprogramming); computing: to employ microcode

**70. microinject**

OED4: 1974, tr. verb f. *microinjection* n.; chiefly biology: 1 to inject into a microscopic object, esp. a living cell; 2 to subject (a cell, etc.) to microinjection with

**71. micromanage**

OED4: 1976, tr. v. f. *micromanagement* n.; also micro-manage, chiefly U.S.: to control and direct (an enterprise or activity) in every particular (esp. in politics)

**72. micropropagate**

OED4: 1979, tr. v. f. *micropropagation* n. (a technique for the propagation of plants by growing plantlets in tissue culture and then planting them out); to propagate by means of micropropagation

**73. micropublish**

D.com: 1970-75, tr. v. f. *micropublication* / *micropublishing* n.; to publish on microfilm or microfiche

**74. mode-lock**

OED4: 1966, tr. v. f. *mode-locking* n. (physics: a technique by which the phase of each mode of oscillation in a laser is 'locked' to those of the two adjacent modes (so that a fixed phase relationship arises between all the modes), resulting in the emission at intervals of about a nanosecond of short trains of extremely short pulses whose duration is of the order of picoseconds; to subject to mode-locking

**75. nitpick**

MW's CD: 1966, tr. / intr. v. f. *nit-picking* n.; tr. v.: to criticize by nit-picking, intr. v.: to engage in nit-picking; OED4: BF f. *nitpicker* n. (a pedantic critic; one who searches for and over-emphasizes trivial errors)

**76. one-hand**

OED4: 1973, tr. v. f. *one-handedness* n. (the state of being one-handed); to do something with one hand [Jones stretched an arm and one-handed it (the ball), and kept it.]

**77. one-up**

MW's CD: 1963, tr. v. f. *one-upmanship* n. (the art or practice of outdoing or keeping one jump ahead of a friend or competitor); to practice one-upmanship on

**78. ovate**

Ayto: 1988, intr. v. f. *ovation* n.; to give someone an ovation; applaud and cheer enthusiastically

**79. paddock-graze**

OED4: 1969, tr. v. f. *paddock-grazing* n. (in dairy farming, a method of pasture management developed by the French farmer, André Voisin, in which several fields are used in rotation); to apply the method of paddock-grazing

**80. panic-buy**

OED4: 1974, v. f. *panic buying* n.; to buy in large quantities goods of which a shortage is threatened or suspected

**81. photoduplicate**

OED4: 1961, tr. v. f. *photoduplication* n.; U.S.: to duplicate (documentary material) using a photocopier

**82. physisorb**

OED4: 1966, tr. / intr. v. f. *physisorption* n. (adsorption which does not involve the formation of chemical bonds); Chemistry: to collect by physisorption

**83. planate**

OED4: 1969, tr. v. f. *planation* n.; to erode to a plain

**84. plea-bargain**

D.com: 1965-70, intr. v. f. *plea-bargaining* n.; Americanism: agree to plead guilty in return for a lesser charge

**85. pole**

OED4: 1961, tr. v. f. *poling* n.; physics: to render (a ferroelectric material) electrically polar by the temporary application of a strong electric field

**86. pot-train**

OED4: 1972, tr. v. f. *pot-training* n.; to train a small child to use a chamber pot

**87. predate**

OED4: 1974, tr. / intr. v. f. *predation* n.; intr.v.: to seek prey; trans. v.: of a predator: to prey on, eat

**88. proact**

OED4: 1980, intr. v. f. *proaction* n.; to take proactive measures; to act in advance, to anticipate

**89. queue-jump**

OED4: 1973, intr. v. f. *queue-jumping* n. (pushing forward out of one's turn in a queue; also fig); to jump a queue

**90. rack-job**

OED4: 1967, intr. v. f. *rack-jobbing* n.; economics: to supply goods to a retailer for display on racks on condition that the supplier undertakes to accept unsold stock after an agreed period

**91. rate-cap**

OED4: **1985**, intr. v. f. *rate-capping* n.; to impose upper limits on the amount of money which a local authority can spend and also levy through rates, intended as a disincentive to excessive spending on local services, etc.

**92. reconfigure**

OED4: **1964**, tr. v.: re + configure, by BF from *configuration* n.; to change the shape or formation of; remodel; restructure

**93. red-cook**

OED4: **1972**, tr. v. f. *red-cooking* n. (a form of Chinese cookery in which meat is fried quickly and then stewed in soya sauce); to cook in such a style

**94. redefect**

OED4: **1963**, intr. v. f. *redefection* n.; to return to a country from which one has previously defected

**95. remediate**

OED4: **1969**, tr. v. f. *remediation* n.; to remedy or redress

**96. respirate**

OED4: **1968**, tr. v. f. *respiration* n.; to subject to artificial respiration

**97. role-take**

OED4: **1972**, intr. v. f. *role-taking* n. (psychology: the imaginary assumption, leading to understanding, of another's role); to empathize, be able to see, feel, respond, and understand as if one were the other person

**98. safekeep**

OED4: **1966**, tr. v. f. *safekeeping* n.; rare: to keep safe, protect

**99. self-destruct**

OED4: **1969**, Aronoff (1975): intr. v. f. noun *self-destruction*; OED4: (of a thing) to destroy itself automatically

**100. sericitize**

OED4: **1965**, tr. v. f. *sericization* n.; geology: MW'sUD: to alter to sericite

**101. shadow-cast**

OED4: **1971**, tr. v. f. *shadow-casting* n.; psychology: to enhance (a microscopic image) by shadow-casting; to subject (a microscopic specimen) to shadow-casting as a technique of perceptual research

**102. skateboard**

OED4: **1968**, intr. v. f. *skateboarding* n.; orig. U.S.: to ride a skateboard

**103. snowboard**

OED4: **1985**, intr. v. f. *snowboarding* n.; to ride a snowboard, to participate in snowboarding

**104. sonolyse**

OED4: **1964**, v. f. *sonolysis* n.; chemistry: to decompose by ultrasound a liquid, esp. water, as a result of the high temperatures generated within the cavities formed

**105. soul-search**

OED4: **1966**, tr. / intr. v. f. *soul-searching* n.; trans. v.: to examine penetratingly and thoroughly; to make a soul-searching analysis of; nonce-use; intr. v.: to engage in examination of one's thoughts, to reflect deeply

**106. spear-fish**

OED4: **1962**, tr. / intr. v. f. *spear-fishing* n.; to fish underwater using a spearlike implement used manually or propelled mechanically

**107. speciate**

OED4: **1964**, intr. v. f. *speciation* n.; biology: of population, of plants or animals: to form species: differentiate into new species

**108. sulphonylate**

OED4: **1980**, tr. v. f. *sulphonylation* n.; chemistry: to convert into a sulphonyl compound

**109. surf-cast**

OED4: **1975**, intr. v. f. *surf-casting* n.; to fish by casting a line into the sea from the shore

**110. swiden**

OED4: **1978**, tr. v. f. *swidening* n. (swidden cultivation – clearing and burning the forest); to cultivate by the swidden method

**111. switch-sell**

OED4: **1965**, intr. v. f. *switch selling* n.; to sell goods using a technique whereby cheap goods are displayed in order to lead the consumer to buy similar but more expensive items

**112. tail-walk**

OED4: **1971**: intr. v. f. *tail-walking* n.; of fish: to move over the surface of water by means of propulsion with the tail

**113. tectonize**

OED4: **1970**: intr. v. f. *tectonization* n.; geology: (of rocks, etc.) to alter by tectonic processes

**114. telemarket**

OED4: **1983**, tr. v. f. *telemarketing* n.; (orig. U.S.), to market goods, services, etc., by means of (freq. unsolicited) telephone calls to prospective customers

**115.telephone-tap**

OED4: **1960s**, v. f. *telephone tapping* n. (the monitoring of telephone and Internet conversations by a third party, often by covert means); to monitor telephone and Internet conversations, often by covert means

**116.teletransport**

OED4: **1968**, tr. v. f. *teletransportation* n. (teleportation); psychics and science fiction: to convey (oneself) by teletransportation

**117.touch-dance**

OED4: **1972**: intr. v. f. *touch-dancing* n. (dancing in which the partner is held close); orig. U.S.: to dance in such a style

**118.touch-type**

OED4: **1962**: intr. v. f. *touch-typing* n.; to type without looking at the keys

**119.trickle-irrigate**

OED4: **1971**, tr. v. f. *trickle irrigation* n. (agriculture: a method of supplying water by means of a restricted, controlled flow to the surface of a growing medium, usually at discrete points, one to each plant); to supply water by this method

**120.tumescence**

OED4: **1966**, intr. v. f. *tumescence* n.; to swell, swell up, become tumid, also figurative

**121.upvalue**

OED4: **1968**, tr. v. f. *upvaluation* n.; to raise the value of (a currency, etc.) on a scale

**122.valet-park**

OED4: **1983**, v. f. *valet parking* n. (N. American: a service provided at a restaurant, etc., in which an attendant parks patrons' motor vehicles); to provide the service of valet-parking

**123.vinify**

OED4: **1969**, tr. v. f. *vinification* n.; 1 to make wine from (grapes often of a specified kind); 2 to make (wine) from grapes

**124.wedel**

MW's CD: **1963**, intr. v. f. *wedeln* n. (a skiing technique first developed in Austria in the 1950s that consists of high-speed turns made in succession with both skis parallel while not noticeably setting the ski edges on a slope); to engage in wedeln

**125.word-process**

OED4: **1985**, tr. v. f. *word processing* n.; computing: to edit, produce, etc. by electronic means, using a word processor

**126.yuppify**

OED4: **1984**, tr. v. f. *yuppification* n. (colloquial, usually disparaging, orig. U.S.: the action or process by which an area, building, clothing, etc., becomes or is rendered characteristic of or suitable for yuppies); to subject to yuppification

**TYPE III: verb from adjective (17 items)****1. anonymize**

OED4: **1975**, tr. v. (usu. in pass.) f. *anonymized* adj.; to make anonymous, especially by removal of names or identifying particulars

**2. auto-destruct**

OED4: **1980** intr. v. f. *auto-destructive* adj.; self-destruct

**3. biodegrade**

D.com: **1970-75**, intr. v. f. *biodegradable* adj.; to decay and become absorbed by the environment:

**4. Dolby**

OED4: **1977**, tr. v. f. *Dolbyed*, *Dolbyized* ppl. adj. (proprietary terms in Britain and the U.S. respectively applied to equipment fitted, and recordings made, with the Dolby system); to make Dolbyized

**5. gobsmack**

OED4: **1977**, tr. v. f. *gobsmacked*, ppl. a. (U.K. slang: flabbergasted, astounded; speechless or incoherent with amazement.); to amaze or astound

**6. hard-wire**

OED4: **1983**, tr. v. f. *hard-wired* adj.; computing: to provide with, or make as, a permanent electric connection

**7. phase-modulate**

OED4: **1968**, tr. v. f. *phase-modulated* ppl. adj.; telecommunications, modulate a wave by variation of its phase

**8. red-shift**

OED4: **1963**, tr. v. f. *red-shifted* adj. (exhibiting a red shift, i.e. displacement of spectral lines towards the red end of the spectrum; increase in the wavelength of electromagnetic radiation, also fig.); to make red-shifted

## 9. ripsnort

OED4: 1975, v. f. *ripsnorting* adj. (orig. U.S.: rip-roaring, full of vigour, spirit, or excellence; first-rate; boisterous; full-blooded); to go boisterously, to rollick

## 10. self-finance

OED4: 1962, tr. v. f. *self-financing* ppl. adj.; of a programme of development, etc.: to finance itself

## 11. silicone

OED4: 1980, tr. v. f. *siliconed* adj.; chemistry: to coat, impregnate, fill, or otherwise treat with silicone or silicone-based material

## 12. silver-point

OED4: 1976, tr. v. f. *silver-pointed* adj. (coloured or tinged in the manner of a silver-point drawing); to cause to appear so

## 13. skeeve<sup>1</sup>

OED4: 1986, tr. v. f. *skeevy* adj.; U.S. slang: to disgust (someone), to repel; to make uncomfortable

## 14. skeeve<sup>2</sup>

OED4: 1991, tr. v. f. *skeevy* adj.; U.S. slang: to loathe (a person or thing); to dislike intensely

## 15. steel-face

OED4: 1961, tr. v. f. *steel-faced* adj.; to cover an engraved metal plate with a film of steel to increase its durability

## 16. superconduct

OED4: 1964, intr. v. f. *superconducting* ppl. adj.; physics: to conduct electricity without any resistance

## 17. tenure

OED4: 1975, tr. v. f. *tenured* adj. (chiefly U.S.: of an official position, usually one in a university or school: carrying a guarantee of permanent employment until retirement; of a teacher, lecturer, etc.: having guaranteed tenure of office); to provide (someone) with a tenured post

## TYPE IV: noun from adjective (24 items)

### 1. alexithymia

OED4: 1976, n. f. *alexithymic* adj.; psychology: an affective disorder characterized by inability to recognize or express emotions

### 2. anaphor

OED4: 1975, n. f. *anaphoric* adj.; a word or phrase with an anaphoric function

### 3. ditz

D.com: 1980-85, n. f. *ditz* adj.; slang: a scatterbrained or eccentric person

### 4. flash

Ayto: 1989; n. f. *flashy* adj.; informal; the quality of being flashy (glittering)

### 5. glitz

OED4: 1977 n. f. *glitzy* adj.; (characterized by glitter or extravagant show; ostentatious, glamorous; hence, tawdry, gaudy; glitteringly spectacular, but in poor taste.), slang, orig. and chiefly N. American: an extravagant but superficial display; showiness, ostentation, esp. show-business glamour or sparkle

### 6. gork

D.com: 1970-75, n. f. *gorked* adj.; slang; anesthetized; apparently an expressive coinage, medicine / medical slang, disparaging and offensive: a patient whose brain has suffered severe and irreversible damage and whose vital functions are being maintained by artificial means

### 7. grunge

MW's CD: 1965, n. f. *grungy* adj.; 1 one that is grungy; 2 rock music incorporating elements of punk rock and heavy metal; also: the untidy fashions typical of fans of grunge; OED4: U.S. slang

### 8. methanogen

OED4: 1977, n. f. *methanogenic* adj.; biology: a methanogenic micro-organism

### 9. paramedic

OED4: 1970, n. f. *paramedical* adj. (supplementary to or supporting the work of medically qualified personnel); a paramedical worker

### 10. piscivore

OED4: 1973, n. f. *piscivorous* adj., a fish-eating animal

### 11. pretectum

OED4: 1961, n. f. *pretectal* adj.; anatomy: the pretectal region of the brain (in front of the tectum)

### 12. psychedelia

OED4: 1967, plural n. f. *psychedelic* adj.; psychedelic articles or phenomena collectively; the subculture associated with psychedelic drugs

### 13. raunch

OED4: 1964, n. f. *raunchy* adj.; colloquial, orig. U.S.: shabbiness, grubbiness, dirtiness; crudeness, vulgarity, licentiousness; boisterousness, earthiness; D.com: also: an earthy, raw musical style derived from blues and gospel

**14. scuzz**

D.com: 1965-70, n. f. *scuzzy* adj. (though relative chronology of coinage uncertain); a dirty, grimy, sordid, or repulsive person or thing; OED4: colloquial and N. American

**15. shonk**

OED4: 1981, n. f. *shonky*<sup>2</sup> adj.; Australian slang: one engaged in irregular or illegal business activities; a 'shark'

**16. skeeve**

OED4: 1990, n. f. *skeevy* adj.; U.S. slang: an obnoxious or contemptible person; a person regarded as disgusting, unpleasant, etc.

**17. somatotroph**

OED4: 1968, n. f. *somatotrophic* adj.; physiology: a cell of the anterior pituitary which synthesizes somatotrophin (growth hormone)

**18. strop**

OED4: 1970, n. f. *stropy* adj.; Brit., colloquial: as a mass noun: belligerence, peevishness (rare); as a count noun: a fit of temper; a sulk

**19. supramolecule**

Ayto: 1989, n. f. *supramolecular* adj.; an artificially created cluster of molecules

**20. synesthete**

MW's CD: 1985, n. f. *synesthetic* adj.; a person affected with synesthesia (a concomitant sensation; especially: a subjective sensation or image of a sense (as of colour) other than the one (as of sound) being stimulated)

**21. tack**

OED4: 1986, n. f. *tacky* adj.; colloquial: that which is 'tacky' or cheap and shabby; shoddy or gaudy material; rubbish, junk

**22. tight-ass**

OED4: 1969, n. f. *tight-assed* adj.; slang, originally and chiefly U.S.: an inhibited or strait-laced person; occasionally a stingy person, a skinflint; occasionally applied (lit.) to clothes: fitting tightly around the buttocks

**23. transgene**

OED4: 1985, n. f. *transgenic* adj.; biology: a gene which is introduced into the genome of another organism

**24. un-hero**

Ayto: 1989, n. f. *un-heroic* adj.; a character who is not the hero of a story.

**TYPE V: noun from another noun which is believed to be its derivative (12 items)**

**1. cineradiograph**

OED4: 1965, n. f. *cineradiography* n. (a diagnostic technique in which a movie camera is used to film the images, as of internal body structures, produced through radiography or fluoroscopy); footage produced by means of cineradiography

**2. cladist**

OED4: 1964, n. f. *cladism* n.; taxonomy: an adherent of cladistics; a cladistic taxonomist

**3. computer-phobe**

OED4: 1974, n. f. *computer-phobia* n.; to fear, distrust or avoid computer technology

**4. eco-label**

Ayto: 1989; n f. *eco-labelling* n.; a label that confirms that the product to which it is attached was made with no harm on the environment

**5. fact-find**

Ayto: 1989; n f. *fact-finding* n.; an instance of fact-finding

**6. grantsman**

MW's CD: 1966, n. f. *grantsmanship* n. (skill in securing grants, as for research, from federal agencies, foundations, or the like); a specialist in grantsmanship; Americanism

**7. homophobe**

OED4: 1971, n. f. *homophobia* n. (fear of homosexuality); a homophobic person

**8. hyponym**

D.com: 1960-65, n. f. *hyponymy* n.; linguistics: a term that denotes a subcategory of a more general class

**9. idiotype**

D.com: 1969, n. f. *idiotypy* n.; on the model of *allotypy*; immunology: the molecular arrangement of amino acids unique to the antigen-binding site of a particular antibody

**10. intertext**

OED4: 1974, n. f. *intertextuality* n.; literary theory: a text considered in the light of its relation (esp. in terms of allusion) to other texts; a body of such texts considered together

**11. shrink-wrap**

OED4: 1961, n. f. *shrink-wrapping* n.; the plastic film used in shrink-wrapping

## 12. trunk

OED4: 1968, n. f. *trunking* n. (the driving of lorries on long journeys along trunk roads.); a long shift of driving a lorry along trunk roads; a spell of 'trunking'; colloquial, new meaning

### Type VI: adjective from abstract noun (6 items)

#### 1. capitated

MW's CD: 1983, adj. f. *capitation* n.; of, relating to, participating in, or being a health-care system in which a medical provider is given a set fee per patient regardless of treatment required

#### 2. complicit

MW's CD: 1973, adj. f. *complicity* n. (1 association or participation in or as if in a wrongful act; 2 an instance of complicity); having complicity

#### 3. desertified

OED4: 1980, adj. f. *desertification* n. (the process of becoming or rendering desert; the transformation of fertile land into desert or arid waste, esp. as a result of human activity); transformed onto desert

#### 4. fluidic

OED4: 1965, adj. f., *fluidics* plural n. (a technology); designed or operating in accordance with the principles and techniques of fluidics; of or pertaining to fluidics

#### 5. genethic

Ayto: 1988, adj. f. *genethics* n.; relating to ethical issues which arise from the human manipulation of genetic material (e.g. by genetic engineering)

#### 6. intertextual

OED4: 1973, adj. f. *intertextuality* n.; literary theory: denoting literary criticism which considers a text in the light of its relation to other texts; also used of texts so considered

### Type VII: adjective from agent noun (3 items)

#### 1. carburetted

MW's CD: 1972, adj. f. *carburettor* agent n.; equipped with a carburettor; OED4: chemistry

#### 2. do-good

D.com: 1965-70, adj. f. *do-gooder* agent n. (Americanism); a well-intentioned but naive and often ineffectual social or political reformer, of or befitting a do-gooder; OED4: disparaging sense

#### 3. teenybop

OED4: 1966, adj. f. *teenybopper* agent n.; a girl in her teens or younger, esp. one who is a fan of pop music and follows the latest fashions; colloquial: of, pertaining to, or consisting of teeny-boppers; example sentence: '*The three British-born Bee Gee brothers, whose recent success has overshadowed the considerable fame they achieved as teenybop idols in the mid-Sixties*' (OED4).

### Type VIII: prefix back-formations (8 items)

#### 1. flappable

D.com: 1965-70, adj. f. *unflappable* adj. (not easily upset or confused, esp. in a crisis); informal: easily upset or confused, esp. under stress

#### 2. concerting

Rice university, Houston, Texas, Dept of Linguistics: 2003, adj. f. *disconcerting* adj.; informal, jocular; suitable, comforting, satisfying ('a concerting telephone conversation')

#### 3. ilch

Rice university, Houston, Texas, Dept of Linguistics: 2003, adj. / noun f. *zilch* adj. / noun; slang, Americanism: total, all-encompassing; OED4: origin of the source word is uncertain

#### 4. oxie

OED4: 1970, adj. f. *anoxic* adj. (greatly deficient in oxygen); involving, characterized by, or related to the presence of oxygen

#### 5. patriate

D.com: 1965-70, tr. v. f. *repatriate* tr. v.; Canadian: to transfer (legislation) to the authority of an autonomous country from its previous mother country

#### 6. pheresis

MW's CD: 1975, n., prob. f. *plasmapheresis* n., medicine: apheresis (removal of whole blood from a patient or donor)

#### 7. plore

Ayto: 1989, n. f. *explore* v.; a museum exhibit which demonstrates some scientific principle in action

## 8. **urb**

D.com: **1965-70**, n. f. *suburb* n. (Latin prefix sub-), informal: an urban area

### Type IX: inflectional back-formations (2 items)

#### 1. **gigaflop**

OED4: **1976**, n. f. *gigaflops* n. (f. giga- + acronym f. **f**loating-point **o**perations **p**er second), -s being taken as plural ending; computing: a unit of computing speed equal to 1000 megaflops

#### 2. **megaflop**

OED4: **1976**, n. f. *megaflops* n. (f. mega- + acronym f. **f**loating-point **o**perations **p**er second), -s being taken as a plural ending, computing: a unit of computing speed equal to one million or 220 floating-point operations per second

## APPENDIX IV

### COMPLETE MATERIAL (1901-2011)

(733 items)

The material collected for the whole period (1900-2011) by Pennanen and in the present research 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), fig (figurative), joc (jocular), orig (originally). 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 (159 items)

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

41. <b>cow-punch</b> < cow-puncher, after 1900, US, slang	121. <b>spinst</b> < spinster, after 1900, US, slang
42. <b>curate</b> < curator, 1909	122. <b>squeg</b> < squeegee, 1933, electronics
43. <b>daysail</b> < day sailor, 1960-65	123. <b>steem-roll</b> < steam-roller, 1900
44. <b>deal</b> < dealer, 1988	124. <b>student-teach</b> < student-teacher, after 1940, US
45. <b>dish-wash</b> < dish-washer, 1952	125. <b>tarp-hang</b> < tarp-hanger, 1912
46. <b>dive-bomb</b> < dive-bomber, 1944	126. <b>strike-break</b> < strike-breaker, 1961
47. <b>doze</b> < dozer, 1945	127. <b>summer-board</b> < summer-boarder, 1903
48. <b>double-head</b> < doubleheader, 1904, orig US	128. <b>supply-teach</b> < supply teacher, 1968
49. <b>escalate</b> <sup>1</sup> < escalator, 1922	129. <b>switch-hit</b> < switch-hitter, 1938, US, coll
50. <b>escalate</b> <sup>2</sup> < escalator, 1959, fig	130. <b>talent-spot</b> < talent-spotter, 1937
51. <b>fellow-travel</b> < fellow-traveller, 1949	131. <b>Tase</b> < Taser, 1991
52. <b>fire-watch</b> < fire-watcher, 1941	132. <b>teleprint</b> < teleprinter, 1971
53. <b>front-load</b> < front-loader, 1977, US	133. <b>tenant-farm</b> < tenant-farmer, 1949
54. <b>freeload</b> < freeloader, 1950-55, infml, US	134. <b>topline</b> < topline, 1988
55. <b>game-keep</b> < game-keeper, 1917	135. <b>train-spot</b> < train-spotter, 1974
56. <b>gate-crasher</b> < gate-crasher, 1930, US, slang	136. <b>transduce</b> <sup>1</sup> < transducer, 1949
57. <b>ghost-write</b> < ghost-writer, 1928, US, slang	137. <b>transduce</b> <sup>2</sup> < transducer, 1952, microbiology
58. <b>gold-dig</b> < gold-digger, 1925, US, slang	138. <b>trench-dig</b> < trench-digger, 1917
59. <b>gramp</b> < grampus, 1925, slang	139. <b>trend-set</b> < trend-setter, 1961
60. <b>green-lane</b> < green laner, 2011	140. <b>trig</b> < trigger, 1927
61. <b>guest-conduct</b> < guest-conductor, 1945	141. <b>trouble-shoot</b> < trouble-shooter, 1950
62. <b>haymake</b> < haymaker, 1933	142. <b>turbocharge</b> < turbocharger, 1981 engineering
63. <b>hedge-hop</b> < hedge-hopper, 1928	143. <b>turbosupercharge</b> < turbosupercharger, 1957
64. <b>helicopt</b> < helicopter, 1961	144. <b>tute</b> < tutor, US, slang
65. <b>high-jack</b> < high-jacker, 1923, US, slang	145. <b>underachieve</b> < underachiever, 1954, psychology
66. <b>hitler</b> < Hitler, 1940	146. <b>vacuum-clean</b> < vacuum-cleaner, after 1900
67. <b>hot-dog</b> < hot-dogger, 1963, surfing slang	147. <b>varitype</b> < VariTyper, 1955, chiefly US
68. <b>housepaint</b> < housepainter, 1945	148. <b>verge</b> < verger, 1900
69. <b>incent</b> < incentive, 1977, orig and chiefly US	149. <b>vive</b> < viveur, 1928
70. <b>jackroll</b> < jackroller, 1990, South Afr, slang	150. <b>vocode</b> < vocoder, 1981
71. <b>kibitz</b> < kibitzer, 1928	151. <b>watch-keep</b> < watch-keeper, after 1940
72. <b>kick-start</b> < kick-starter, 1928	152. <b>whipper-snap</b> < whipper-snapper, 1908
73. <b>knuckle-dust</b> < knuckle-duster, 1909, slang, US	153. <b>windjam</b> < wind-jammer, 1952, US, slang
74. <b>lase</b> < laser, 1962	154. <b>window-clean</b> < window-cleaner, 1950
75. <b>lech</b> < lecher, 1911	155. <b>window-dress</b> < window-dresser, after 1900
76. <b>lime</b> < limer, 1973, the W. Indies	156. <b>windsurf</b> < Windsurfer, 1969, orig US
77. <b>map-read</b> < map-reader, 1952	157. <b>wire-tap</b> < wire-tapper, after 1950
78. <b>mase</b> < maser, 1962	158. <b>volumize</b> < volumizer, 1991
79. <b>mind-blow</b> < mind-blower, 1970, slang	159. <b>zip</b> < zipper, 1922

#### TYPE II: verb from action noun (318 items)

1. <b>abreact</b> < abreaction, 1912, psychoanalysis	158. <b>kite-fly</b> < kite-flying, 1965, banking, slang
2. <b>access</b> < accession, 1962	159. <b>lab-examine</b> < lab(oratory) examination, 1956
3. <b>accreditate</b> < accreditation, 1989	160. <b>layback</b> < laybacking, 1972, mountaineering
4. <b>acculturate</b> < acculturation, 1930, chiefly US	161. <b>lead-poison</b> < lead-poisoning, after 1900, US, slang
5. <b>adenylate</b> < adenylation, 1972, biochemistry	162. <b>lenite</b> < lenition, 1912, phonology
6. <b>admirate</b> < admiration, after 1900, US, slang	163. <b>liaise</b> < liaison, 1938, slang
7. <b>advect</b> < advection, 1957, meteorology, oceanography	164. <b>libel-sue</b> < libel-suit, 1944
8. <b>age-date</b> < age-dating, 1984, geology	165. <b>lip-read</b> < lip-reading, 1927
9. <b>air-condition</b> < air-conditioning, 1942	166. <b>loan-translate</b> < loan-translation, 1952
10. <b>air-evacuate</b> < air-evacuation, 1951	167. <b>loco-spot</b> < loco-spotting, 1968
11. <b>air-ship</b> < air-shipping, 1958	168. <b>lorry-hop</b> < lorry-hopping, 1916, slang
12. <b>alluviate</b> < alluviation, 1968	169. <b>loud-hail</b> < loud-hailing, 1943
13. <b>appersonate</b> < appersonation, after 1935, psychiatry	170. <b>lyse</b> < lysis, 1925
14. <b>apple-polish</b> < apple-polishing, 1951, US, slang	171. <b>maffick</b> < Mafficking, Mafeking, 1900
15. <b>ass-kiss</b> < ass-kissing, 1974, vulgar	172. <b>marketize</b> < marketization, 2011
16. <b>autolyse</b> < autolysis, 1903	173. <b>mediocritize</b> < mediocritization, 1972, orig US
	174. <b>metalate</b> < metalation, 1939, chemistry

17. **automate** < automation, 1954  
18. **auto-suggest** < auto-suggestion, 1921, psychology  
19. **aviate** < aviation, 1900, US, slang  
20. **avigate** < avigation, after 1900, US, slang  
21. **back-calculate** < back-calculation, 1988  
22. **back-fire** < back-firing, 1906, US  
23. **back-form** < back-formation, 1943  
24. **back-talk** < back-talking, 1962, chiefly US, coll  
25. **batch-process** < batch processing, 1964, computing  
26. **belly-land** < belly-landing, 1944  
27. **bibliography** < bibliography, 1961  
28. **biomagnify** < biomagnification, 1970-75  
29. **blast-freeze** < blast-freezing, 1965  
30. **blizz** < blizzard, 1910, US  
31. **blockbust** < blockbusting, 1954, US  
32. **brain-wash** < brain-washing, 1955  
33. **break-dance** < break-dancing, 1982, orig US  
34. **brute** < bruiting, 1903  
35. **carboxylate** < carboxylation, 1934, biochemistry  
36. **carjack** < car-jacking, 1991  
37. **carol sing** < carol singing, 1954, Austr  
38. **cavitate** < cavitation, 1909  
39. **chain-react** < chain-reaction, 1959  
40. **chemisorb** < chemisorptions, 1935, chemistry  
41. **choreograph** < choreography, 1943, orig US  
42. **Christmas-shop** < Christmas-shopping, 1951  
43. **chromatograph** < chromatography, 1953, chemistry  
44. **coit** < coition, after 1900, slang  
45. **cold-fax** < cold-faxing, 2011  
46. **computer-generate** < computer-generating, the 1990s, computing  
47. **concord** < concordance, 1969  
48. **contracept** < contraception, 1965-70  
49. **convect** < convection, 1953  
50. **co-vary** < covariation, 1950  
51. **crash-land** < crash-landing, 1941  
52. **crise** < crisis, 1938  
53. **cross-dress** < cross-dressing, 1966  
54. **cross-own** < cross-ownership, 2011  
55. **cross-refer** < cross-reference, 1951  
56. **cybernate** < cybernation, 1960-65  
57. **decarboxylate** < decarboxylation, 1922, chemistry  
58. **decompensate** < decompensation, 1903  
59. **decondense** < decondensation, 1965, cytology  
60. **deconstruct** < deconstruction, 1973, philosophy and literary theory  
61. **decriminalize** < decriminalization, 1963  
62. **dedifferentiate** < dedifferentiation, 1915-20, biology  
63. **defibrillate** < de- + fibrillation, 1930-35, medicine  
64. **demerge** < demerger, 1980  
65. **demodulate** < demodulation, 1932, electricity  
66. **derecognize** < derecognition, 1961  
67. **deregulate** < deregulation, 1964  
68. **derivatize** < derivatization, 1939, chemistry  
69. **desorb** < desorption, 1924  
70. **destruct** < destruction, 1958, chiefly US  
175. **metallide** < metalliding, 1967, manufacturing  
176. **methanate** < methanation, 1963, chemistry  
177. **metricate** < metrication, 1970  
178. **microcode** < microcoding, 1985, computing  
179. **microinject** < microinjection, 1974, biology  
180. **micromanage** < micromanagement, 1976, chiefly US esp. in politics  
181. **micropropagate** < micropropagation, 1979  
182. **micropublish** < micropublication/ micropublishing, 1970-75  
183. **mirate** < migration, 1950, US, coll  
184. **mixbathe** < mixed bathing, 1906  
185. **mode-lock** < mode-locking, 1966, physics  
186. **mountain-climb** < mountain-climbing, 1953  
187. **mutarotate** < mutarotation, 1951, chemistry  
188. **night-fly** < night-flying, 1927  
189. **night-walk** < night-walking, 1903  
190. **nitpick** < it-picking, 1966  
191. **non-intervene** < non-intervention, 1944  
192. **notate** < notation, 1903  
193. **one-hand** < one-handedness, 1973  
194. **one-up** < one-upmanship, 1963  
195. **ovate** < ovation, 1988  
196. **paddock-graze** < paddock-grazing, 1969, dairy farming  
197. **panic-buy** < panic buying, 1974  
198. **parapent** < parapenting, 2011  
199. **parcelate** < parcellation, 1934  
200. **pattern-bomb** < pattern-bombing, 1944  
201. **pend** < pending, 1953, chiefly commerce  
202. **perseverate** < perseveration, 1915, psychology  
203. **phagocytose** < phagocytosis, 1912, biology  
204. **photoduplicate** < photoduplication, 1961, US  
205. **physisorb** < physisorption, 1966, chemistry  
206. **pinocytose** < pinocytosis, 1955-60, physiology  
207. **planate** < planation, 1969  
208. **planograph** < planography, after 1909  
209. **plea-bargain** < plea-bargaining, 1965-70, US  
210. **pole** < poling, 1961, physics  
211. **politick** < politicking, 1917  
212. **polygonize** < polygonization, 1949, metallurgy  
213. **pot-shoot** < pot-shot, 1913  
214. **pot-train** < pot-training, 1972  
215. **practice-teach** < practice teaching, 1952  
216. **predate** < predation, 1974  
217. **price-fix** < price-fixing, 1949  
218. **proact** < proaction, 1980  
219. **prognose** < prognosis, 1900  
220. **propagand** < propaganda, 1901  
221. **psycho-analyse** < psychoanalysis, 1923  
222. **pyrolize** < pyrolysis, 1932, chemistry  
223. **queue-jump** < queue-jumping, 1973  
224. **quisle** < Quisling, 1940, US, slang  
225. **racialize** < racialization, 1930  
226. **rack-job** < rack-jobbing, 1967, economics  
227. **radiolocate** < radiolocation, 1945  
228. **rate-cap** < rate-capping, 1985  
229. **reconfigure** < (re)configuration, 1964  
230. **red-cook** < red-cooking, 1972  
231. **redefect** < redefection, 1963  
232. **reflate** < reflation, 1932  
233. **relect** < reluctance, 1912

71. <b>direct-dial</b> < direct-dialing, 1969, telephony	234. <b>remediate</b> < remediation, 1969
72. <b>disinform</b> < disinformation, 1975-80	235. <b>reparate</b> < reparation, 1922
73. <b>Disneyfy</b> < Disneyfication, 2011	236. <b>repercuss</b> < repercussion, 1923
74. <b>divisionalize</b> < divisionalization, 1982	237. <b>respirate</b> < respiration, 1968
75. <b>dollarize</b> < dollarization, 1982, economics	238. <b>reune</b> < reunion, 1929, US, slang
76. <b>downmarket</b> < downmarketing, 2011	239. <b>revalorize</b> < revalorization, 1928
77. <b>downwell</b> < downwelling, 1967	240. <b>revaluate</b> < reevaluation, 1921
78. <b>drop-ship</b> < drop-shipment, 1999	241. <b>role-take</b> < role-taking, 1972, psychology
79. <b>drownproof</b> < drownproofing, 1975-80	242. <b>rough-land</b> < rough landing, 1959
80. <b>eco-label</b> < eco-labelling, 2011	243. <b>safekeep</b> < safekeeping, 1966
81. <b>eco-renovate</b> < eco-renovation, 2006	244. <b>sandsurf</b> < sandsurfing, 2007
82. <b>ecphore</b> < ecphoria, 1917, psychology	245. <b>scapegoat</b> < scapegoating, 1943
83. <b>electrophorese</b> < electrophoresis, 1965-70, physical chemistry	246. <b>self-destruct</b> < self-destruction, 1969
84. <b>elocute</b> < elocution, 1909, US	247. <b>self-determine</b> < self-determination, 1924
85. <b>emote</b> < emotion, 1928, US	248. <b>self-hypnotize</b> < self-hypnosis, 1925
86. <b>enculturate</b> < enculturation, the 1970s	249. <b>self-ignite</b> < self-ignition, 1959
87. <b>endocytose</b> < endocytosis, 1970-75, physiology	250. <b>seriate</b> < seriation, 1944
88. <b>eutrophicate</b> < eutrophication, 1970, ecology	251. <b>sericitize</b> < sericitzation, 1965, geology
89. <b>evapotranspire</b> < evapotranspiration, 1967, geography	252. <b>set-shoot</b> < set-shot, 1950, US, basketball
90. <b>event</b> < eventing, 1970, equestrianism (= horse riding)	253. <b>shadow-box</b> < shadow-boxing, 1924, US, slang
91. <b>excyst</b> < excystation, 1913, biology and medicine	254. <b>shadow-cast</b> < shadow-casting, 1971, psychology
92. <b>exfiltrate</b> < exfiltration, 1980, orig US, military	255. <b>shotgun-marry</b> < shotgun marriage, 1950
93. <b>exflagellate</b> < exflagellation, 1912, biology, zoology	256. <b>show-jump</b> < show-jumping, 1936
94. <b>exocytose</b> < exocytosis, 1970-75, physiology	257. <b>side-dress</b> < side-dressing, 1959, US
95. <b>exsolve</b> < exsolution, 1942, geology	258. <b>sight-read</b> < sight-reading, 1903, US, slang
96. <b>extrapose</b> < extraposition, 1965, grammar	259. <b>skateboard</b> < skateboarding, 1968, orig US
97. <b>face-lift</b> < face-lifting, 1939	260. <b>skip-bomb</b> < skip-bombing, 1955
98. <b>fact-find</b> < fact-finding, 1953, US	261. <b>sky-write</b> < skywriting, 1959
99. <b>fascise</b> < fascism, 1943	262. <b>snowboard</b> < snowboarding, 1985
100. <b>featherbed</b> < feather-bedding, 1962	263. <b>snowsurf</b> < snowsurfing, 2011
101. <b>fellate</b> < fellatio, 1941	264. <b>softland</b> < soft-landing, 1960
102. <b>fine-tune</b> < fine tuning, 1969, orig US	265. <b>sonolyse</b> < sonolysis, 1964, chemistry
103. <b>finger-pick</b> < finger-picking, 1983, music	266. <b>sorb</b> < sorption, 1909, physical chemistry
104. <b>Finlandize</b> < Finlandization, 1970-75	267. <b>soul-search</b> < soul-searching, 1966
105. <b>flag-wag</b> < flag-wagging, 1923	268. <b>sound-condition</b> < sound-conditioning, 1959
106. <b>flight-deliver</b> < flight-delivery, 1949	269. <b>sound-proof</b> < soundproofing, 1959
107. <b>fluoridate</b> < fluoridation, 1949	270. <b>spear-fish</b> < spear-fishing, 1962
108. <b>fly-tip</b> < fly-tipping, 1985	271. <b>speciate</b> < speciation, 1964, biology
109. <b>force-land</b> < force(d) landing, 1928	272. <b>speed-read</b> < speed-reading, 1960
110. <b>forthold</b> < fort-holding, 1989	273. <b>spermatize</b> < spermatization, 1932, mycology
111. <b>fragmentate</b> < fragmentation, 1940-45	274. <b>steam-distill</b> < steam distillation, 1923, chemistry
112. <b>freeze-dry</b> < freeze-drying, 1959	275. <b>subassemble</b> < subassembly, 1940
113. <b>frequency-modulate</b> < frequency modulation, 1962, electricity	276. <b>subincise</b> < subincision, 1904
114. <b>gas-flush</b> < gas-flushing, 2011	277. <b>subvocalize</b> < subvocalization, 1947
115. <b>gay-bash</b> < gay-bashing, 1989, orig and chiefly US, slang	278. <b>sulphonylate</b> < sulphonylation, 1980, chemistry
116. <b>gazunder</b> < gazundering, 1988	279. <b>sun-bathe</b> < sun-bathing, 1935
117. <b>gelate</b> < gelation, 1915, biology	280. <b>superinfect</b> < superinfection, 1954, medicine
118. <b>gentrify</b> < gentrification, 1972	281. <b>superovulate</b> < superovulation, 1956, physiology
119. <b>gift-wrap</b> < gift-wrapping, 1948	282. <b>surf-bathe</b> < surf-bathing, 1952
120. <b>glam</b> < glamour, 1937	283. <b>surf-cast</b> < surf-casting, 1975
121. <b>glide-bomb</b> < glide-bombing, 1940	284. <b>surf-ride</b> < surf-riding, 1953
122. <b>google</b> < googly, 1907, cricket	285. <b>surveil</b> < surveillance, 1914
123. <b>grice</b> < gricing, 1984, coll	286. <b>swiden</b> < swidening, 1978
124. <b>grit-blast</b> < grit-blasting, 1962	287. <b>switch-sell</b> < switch selling, 1965
125. <b>group-think</b> < group-thinking, 1959	288. <b>symbiose</b> < symbiosis, 1960
126. <b>haemolyse</b> < haemolysis, 1902	289. <b>tail-walk</b> < tail-walking, 1971
	290. <b>tape-record</b> < tape-recording, 1959
	291. <b>tariffy</b> < tariffication, 2011

<p>127. <b>hand-hold</b> &lt; hand-holding, 1963</p> <p>128. <b>hitch-hike</b> &lt; hitch-hiking, 1923</p> <p>129. <b>hoke</b> &lt; hokum, 1938, US, slang</p> <p>130. <b>holograph</b> &lt; holography, 1968, physics</p> <p>131. <b>home-deliver</b> &lt; home-delivery, 1958</p> <p>132. <b>home-keep</b> &lt; home-keeping, after 1900</p> <p>133. <b>house-clean</b> &lt; house-cleaning, 1938</p> <p>134. <b>husband-hunt</b> &lt; husband-hunting, 1955</p> <p>135. <b>hydroborate</b> &lt; hydroboration, 1961, chemistry</p> <p>136. <b>hydrofracture</b> &lt; hydrofracturing, 1983</p> <p>137. <b>hyperventilate</b> &lt; hyperventilation, 1931, physiology</p> <p>138. <b>ice-fish</b> &lt; ice-fishing, 1907</p> <p>139. <b>immunosuppress</b> &lt; immunosuppression, 1965-70</p> <p>140. <b>Indian-wrestle</b> &lt; Indian wrestling, 1938, US</p> <p>141. <b>infantilize</b> &lt; infantilization, 1943</p> <p>142. <b>infotain</b> &lt; infotainment, 2011</p> <p>143. <b>inscript</b> &lt; inscription, 1923</p> <p>144. <b>interconvert</b> &lt; inter-conversion, 1953</p> <p>145. <b>intercool</b> &lt; intercooling, 1944</p> <p>146. <b>intergroup</b> &lt; intergrouping, 1970</p> <p>147. <b>interline</b> &lt; interlining, 1975, airlines</p> <p>148. <b>introgres</b> &lt; introgresion, 1958</p> <p>149. <b>introject</b> &lt; introjection, 1925, psychology</p> <p>150. <b>island-hop</b> &lt; island-hopping, 1956</p> <p>151. <b>jaw-bone</b> &lt; jawboning, 1966, US, slang</p> <p>152. <b>job-hunt</b> &lt; job-hunting, 1946</p> <p>153. <b>job-share</b> &lt; job sharing, 1981</p> <p>154. <b>jump-shoot</b> &lt; jumpshot, 1950</p> <p>155. <b>junk</b> &lt; junction, 1941</p> <p>156. <b>keeper</b> &lt; keeping, 1921</p> <p>157. <b>kerb-crawl</b> &lt; kerb-crawling, 1971</p>	<p>292. <b>tectonize</b> &lt; tectonization, 1970, geology</p> <p>293. <b>telecommunicate</b> &lt; telecommunications, after 1932</p> <p>294. <b>telemarket</b> &lt; telemarketing, 1983, orig US</p> <p>295. <b>telephone-tap</b> &lt; telephone tapping, 1960s</p> <p>296. <b>teleport</b> &lt; teleportation, 1947, psychics and science fiction</p> <p>297. <b>teletransport</b> &lt; teletransportation, 1968, psychics and science fiction</p> <p>298. <b>televise</b> &lt; television, 1927</p> <p>299. <b>thrombose</b> &lt; thrombosis, 1910, pathology</p> <p>300. <b>touch-dance</b> &lt; touch-dancing, 1972, orig US</p> <p>301. <b>touch-type</b> &lt; touch-typing, 1962</p> <p>302. <b>town-plan</b> &lt; town-planning, 1909</p> <p>303. <b>transvaluate</b> &lt; transvaluation, 1912</p> <p>304. <b>trial-subscribe</b> &lt; trial-subscription, 1949</p> <p>305. <b>trickle-irrigate</b> &lt; trickle irrigation, 1971, agriculture</p> <p>306. <b>tumesc</b> &lt; tumescence, 1966</p> <p>307. <b>two-time</b> &lt; two-timing, 1947</p> <p>308. <b>type-cast</b> &lt; tape-casting, 1959</p> <p>309. <b>upkeep</b> &lt; upkeep, 1926</p> <p>310. <b>upvalue</b> &lt; upvaluation, 1968</p> <p>311. <b>valet-park</b> &lt; valet parking, 1983, US</p> <p>312. <b>vinify</b> &lt; vinification, 1969</p> <p>313. <b>Vogue</b> &lt; Vogueing / Vogueing, 2011</p> <p>314. <b>water-walk</b> &lt; water-walking, 2011</p> <p>315. <b>wedel</b> &lt; wedeln, 1963, skiing</p> <p>316. <b>window-shop</b> &lt; window-shopping, 1934</p> <p>317. <b>word-process</b> &lt; word processing, 1985, computing</p> <p>318. <b>yuppify</b> &lt; yuppification, 1984, orig US, colloquial, usually disparaging</p>
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**TYPE III: verb from adjective (65 items)**

<p>1. <b>anonymize</b> &lt; anonymized, 1975</p> <p>2. <b>auto-destruct</b> &lt; auto-destructive, 1980</p> <p>3. <b>benevol</b> &lt; benevolent, 1948</p> <p>4. <b>biodegrade</b> &lt; biodegradable, 1970-75</p> <p>5. <b>bonderize</b> &lt; Bonderized, 1938, engineering</p> <p>6. <b>bottle-feed</b> &lt; bottle-fed, 1957</p> <p>7. <b>breast-feed</b> &lt; breast-fed, 1929</p> <p>8. <b>brill</b> &lt; brilliant, 1900</p> <p>9. <b>cairn</b> &lt; cairned, 1937</p> <p>10. <b>cathect</b> &lt; cathectic, 1925, psychoanalysis</p> <p>11. <b>computerize</b> &lt; computerized, 1960</p> <p>12. <b>custom-make</b> &lt; custom-made, 1949</p> <p>13. <b>decongest</b> &lt; decongestant, 1955-60, pharmacology</p> <p>14. <b>disproportionate</b> disproportionate, 1934, chemistry</p> <p>15. <b>Dolby</b> &lt; Dolbyed, Dolbyized, 1977</p> <p>16. <b>fetishize</b> &lt; fetishized, 1934</p> <p>17. <b>floss</b> &lt; flossy, 1938, chiefly US, slang</p> <p>18. <b>french fry</b> &lt; french fried, after 1918, US</p> <p>19. <b>gangle</b> &lt; gangling, 1942, slang</p> <p>20. <b>garrul</b> &lt; garrulous, 1942</p> <p>21. <b>gobsmack</b> &lt; gobsmacked, 1977, slang</p> <p>22. <b>half-choke</b> &lt; half-choked, 1948</p> <p>23. <b>half-starve</b> &lt; half-starved, 1952</p>	<p>34. <b>peeve</b> &lt; peevish, 1913, US, slang</p> <p>35. <b>penure</b> &lt; penurious, 1910</p> <p>36. <b>phase-modulate</b> &lt; phase-modulated, 1968, telecommunications</p> <p>37. <b>prefabricate</b> &lt; prefabricated, 1941</p> <p>38. <b>quantitate</b> &lt; quantitative, 1927</p> <p>39. <b>red-shift</b> &lt; red-shifted, 1963</p> <p>40. <b>repug</b> &lt; repugnant, 1900</p> <p>41. <b>retice</b> &lt; reticent, 1906, a nonce-word</p> <p>42. <b>ripsnort</b> &lt; ripsnorting, 1975, orig US</p> <p>43. <b>rort</b> &lt; rorty, 1931, slang</p> <p>44. <b>sardine-pack</b> &lt; sardine-packed, 1959</p> <p>45. <b>scrag</b> &lt; scraggy, 1937, slang</p> <p>46. <b>self-feed</b> &lt; self-feeding, after 1900</p> <p>47. <b>self-finance</b> &lt; self-financing, 1962</p> <p>48. <b>shab</b> &lt; shabby, 1900</p> <p>49. <b>silicone</b> &lt; silicone, 1980, chemistry</p> <p>50. <b>silver-point</b> &lt; silver-pointed, 1976</p> <p>51. <b>skeeve<sup>1</sup></b> &lt; skeezy, 1986, US, slang</p> <p>52. <b>skeeve<sup>2</sup></b> &lt; skeezy, 1991, US, slang</p> <p>53. <b>sozzle</b> &lt; sozzled, 1937, slang</p> <p>54. <b>steel-face</b> &lt; steel-faced, 1961,</p> <p>55. <b>stinge</b> &lt; stingy, 1946</p> <p>56. <b>storm-toss</b> &lt; storm-tossed, 1946</p> <p>57. <b>streamline</b> &lt; streamlined, 1927</p>
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24. <b>hard-wire</b> < hard-wired, 1983, computing	58. <b>stuff</b> < stuffy, 1927, slang
25. <b>housebreak</b> < housebroken, after 1900	59. <b>stupend</b> < stupendous, 1904, (G. B. Shaw's word)
26. <b>involute</b> < involuted, 1909	60. <b>superconduct</b> < superconducting, 1964, physics
27. <b>jet-propel</b> < jet-propelled, 1956	61. <b>tailor-make</b> < tailor-made, 1952
28. <b>mass-produce</b> < mass-produced, 1940	62. <b>tax-pay</b> < tax-paid, 1918
29. <b>nodulate</b> <sup>1</sup> < nodulated, 1939,	63. <b>tenure</b> < tenured, 1975, chiefly US
30. <b>nodulate</b> <sup>2</sup> < nodulated, 1956, botany	64. <b>unweight</b> < unweighted, 1930
31. <b>norm</b> < normed, 1959, mathematics	65. <b>zonk</b> < zonked, 1950, US
32. <b>obedience-train</b> < obedience-trained, 1952	
33. <b>outmode</b> < outmoded, 1906	

**TYPE IV: noun from adjective (97 items)**

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

46. <b>metatroph</b> < metatrophic, after 1930, biology	ophthalmology
47. <b>methanogen</b> < methanogenic, 1977, biology	93. <b>trivia</b> < trivialis, 1920
48. <b>metronym</b> < metronymic, 1904	94. <b>ultramicroscope</b> < ultramicroscopic, 1906
49. <b>narcolept</b> < narcoleptic, 1957	95. <b>un-hero</b> < un-heroic, 1989
50. <b>orbicule</b> < orbicular, 1931, petrology	96. <b>wack</b> < wacky, 1938, orig US, slang
51. <b>osmophore</b> < osmophoric, 1919, chemistry	97. <b>warb</b> < warby, 1910, Austr, slang

**TYPE V: noun from another noun which is believed to be its derivative (41 items)**

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

**TYPE VI: adjective from abstract noun (26 items)**

1. <b>aerobatic</b> < aerobatics, 1918	16. <b>fluidic</b> < fluidics, 1965
3. <b>argentaffin</b> < argentaffinity, 1926, histology	17. <b>genethic</b> < genetics, 1988
4. <b>autoimmune</b> < autoimmunization, 1952, immunology	18. <b>hyperthyroid</b> < hyperthyroidism, 1916, medicine
5. <b>avionic</b> < avionics, 1949	19. <b>hypoparathyroid</b> < hypoparathyroidism, 1910, medicine
6. <b>biodiverse</b> < biodiversity, 2011	20. <b>intertextual</b> < intertextuality, 1973
7. <b>biometric</b> < biometrics, 1901	21. <b>logistic</b> < logistics, 1934
8. <b>capitated</b> < capitation, 1983	22. <b>paratroop</b> < paratroops, 1941
9. <b>cloze</b> < closure, 1953, psychology	23. <b>premonit</b> < premonition, 1948, immunology
10. <b>complicit</b> < complicity, 1973	24. <b>superconductive</b> < superconductivity, 1913, physics
11. <b>co-ordinate</b> < co-ordination, 1927, chemistry	25. <b>surreal</b> < surrealism, 1937
12. <b>cybernetic</b> < cybernetics, 1951	26. <b>vacuolating</b> < vacuolation, 1960, medicine
13. <b>dermatoglyphic</b> < dermatoglyphics, 1926	
14. <b>desertified</b> < desertification, 1980	
15. <b>disfluent / dysfluent</b> < disfluency / dysfluency, 2011	

**Type VII: adjective from agent noun (4 items)**

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

**Type VIII: prefix back-formations** (17 items)

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

**Type VIII: inflectional back-formations** (7 items)

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

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## SUMMARY IN CZECH

Předmětem této studie je podrobný popis a analýza anglického zpětného tvoření slov ve 20. a na začátku 21. století. Tento slovotvorný proces sice patří k méně frekventovaným, nicméně je v současnosti v angličtině stále produktivní.

Zpětné tvoření není vázáno pouze na angličtinu, vyskytuje se i v jiných jazycích, včetně jazyka českého. Tato práce, mimo jiné, využívá také kontrastivní přístup k dané problematice a zabývá se srovnáním anglického zpětného tvoření se situací v češtině. Výsledkem tohoto zkoumání je zjištění, že slovotvorný proces, který by byl zcela identický s anglickou zpětnou derivací, v češtině neexistuje. Existuje však jev srovnatelný – odtržení slovotvorného sufixu a vytvoření morfologicky jednoduššího slova – který může být označen jako zpětná derivace (stejně jako v angličtině). Avšak slovotvorné typy, které se tohoto procesu účastní, jsou jiné než v angličtině.

Tato studie se však především soustřeďuje na zpětnou derivaci anglickou, a to zejména na poslední část daného období. Jejím cílem je určit typické rysy tohoto slovotvorného procesu v současnosti a zachytit případné změny, které jsou výsledkem vývoje po celé 20. století. Kromě toho byly na základě analýzy současné situace a výsledků dosažených ve výzkumu neologismů, které se účastní procesu zpětného tvoření, vyvozeny a popsány převažující tendence směrem k dalšímu vývoji, a dále také navrženy další možné směry zkoumání daného jevu.

Popis a analýza situace v období od začátku 20. století až do současnosti vychází z celkového vzorku 708 jednotek. Ten obsahuje čtyři vzorky menší:

- 225 zpětných derivací uvedených v Pennanenově klasické studii (1966), které spadají do první poloviny 20. století (od r. 1900 do začátku 60. let)
- nový vzorek 246 zpětných derivací shromážděných a analyzovaných v rámci této práce pro stejné období
- vzorek 229 nejnovějších zpětných derivací vzniklých během druhého období, tj. od 60. let 20. století do současnosti
- vzorek 8 jednotek z druhého období, které byly v této práci identifikovány jako zpětné derivace, nikoliv však takto explicitně označeny ve slovnících nebo dalších zdrojích. Identifikace těchto slov byla umožněna jednak použitou metodou, což je kombinace Pennanenovy původní typologie a pravidel na straně jedné a dalších typů a typických rysů vyplývajících z mého výzkumu na straně druhé.

V části výzkumu, který se zabýval neologismy, bylo dále vygenerováno 60 potenciálních zpětných derivací – jednotek, které nebyly zařazeny do slovníků nebo podobných zdrojů, avšak jsou v této práci navrženy jako možné výsledky procesu zpětného tvoření z neologismů v budoucnosti. U tohoto vzorku byl pro získání zpětné vazby učiněn ještě další krok, a to prozkoumání současné živé neformální komunikace mezi uživateli internetu. Z 60 hypotetických zpětných derivací bylo tímto způsobem potvrzeno 25 skutečně užitých takto utvořených slov anglicky mluvícími účastníky diskusí či autory článků. Celkový počet jednotek v celém materiálu tedy činí 733 (viz Appendix IV).

Při zkoumání daného jsem uplatnila jak diachronický, tak synchronický přístup. K získání dostatečného objemu aktuálních odborných informací jsem nejprve prostudovala příslušnou odbornou, a to zejména současnou literaturu. Abych k výzkumu shromáždila dostatečný počet relevantních slov, prozkoumala jsem řadu obecných jazykových, v nedávné době podstatně

aktualizovaných, slovníků, nejstarší z nich v roce 1995, nejnovější v roce 2009. Využila jsem i další zdroje, zejména slovníky a sbírky neologismů, které považuji za důležitou součást mého vzorku. Ve zvolených slovnících jsem vyhledávala zejména slova explicitně označená jako zpětné derivace. V této fázi byl diachronní přístup nevyhnutelný – bylo nutné srovnávat datum prvního výskytu slova základového a slova zpětně utvořeného. Ne vždy však bylo slovo derivované prezentováno ve slovníku jako hlavní heslo, v některých případech byla zpětná derivace jednou z derivací hlavního hesla, pak bylo nutné prohledat celou sekci, aby byla jednotka i další relevantní informace nalezeny. Často se osvědčila tzv. obsahová analýza (popsaná v Marchandově studii, 1969). Na základě této analýzy může být zpětně utvořené slovo identifikováno nejen diachronně, tj. podle pozdějšího data výskytu než je datum u slova základového, ale také synchronně, tedy podle definice lexikálního významu, která obsahuje základové slovo jako svou nezbytnou součást (jako v klasických případech *burgle* „act as a burglar“, *televise* „put on television“) a z níž je možné logicky považovat definované slovo za (zpětně) odvozené.

V jiných případech bylo nutno srovnat informace o původu slov v různých zdrojích (také ve zdrojích internetových), aby bylo možno určit jednotku jako vhodnou k zařazení do vzorku zpětných derivací. U některých slov, zvláště u slov novějších a zejména u nejčerstvějších neologismů, byla identifikace složitější. V takových případech jsem se při rozhodování opírala o transparentní typologii, o své vlastní lingvistické znalosti a někdy dokonce i o lingvistickou intuici.

Shromážděný materiál je rozříděn do devíti typů, a to podle několika hledisek. Nejdůležitějším hlediskem je slovní druh obou slov – slova výsledného (zpětné derivace) a slova základového (delší, morfologicky složitější jednotky). U některých základových slov je důležitým rozlišovacím hlediskem i specifitější rys – sémantická reference, a to sémantická role konatele nebo děje, nebo abstraktní povaha podstatných jmen. Tato typologie devíti kategorií, aplikovaná u jakéhokoliv vzorku bez ohledu na specifický cíl konkrétní části zkoumání, je zčásti založena na typologii stanovené Pennanenem (1966), jehož klasická studie je metodologickým základem tohoto výzkumu. Pennanenova původní typologie, zahrnující šest základních typů zpětných derivací (slovesa z konatelských substantiv, slovesa z dějových substantiv, slovesa z adjektiv, substantiva z adjektiv, substantiva z jiných, morfologicky složitějších substantiv a adjektiva z abstraktních nebo dějových substantiv), je v této práci rozšířena o další tři typy: adjektiva z konatelských substantiv, zpětné derivace vzniklé odtržením předpony a flektivní zpětné derivace.

Pokud jde o předponové zpětné derivace a zpětné derivace flektivní, Pennanen je nepovažuje za relevantní, protože podle jeho názoru změna, ke které dochází, nezasahuje vnitřní formu slova. U slov vzniklých odtržením předpony hovoří o pouhém krácení, protože vzniklé slovo zůstává na stejné úrovni jako slovo základové (má stejnou vnitřní formu); v případě flektivních zpětných derivací říká, že je změnou zasažen pouze jeden element vnitřní formy (číslo substantiva), přičemž sémantická struktura zůstává nedotčena. V této práci jsou však oba typy do zkoumaného materiálu zahrnuty a začleněny do původní typologie jako Typ VIII a Typ IX. V odborné literatuře jsou běžně zmiňovány jako příklady zpětného tvoření (např. Bauer, 1983, Katamba, 2006). Předpokládám, že reprezentují dva specifické druhy tohoto slovo-tvořného procesu, bez ohledu na to, jak hluboko je zasažena struktura základového slova. Výsledkem je vždy nové slovo, které v jazyce buď neexistovalo, nebo nebylo používáno. Předponové zpětné derivace v mém vzorku jsou většinou založeny na vztahu hyponymie nebo antonymie a jsou

zastoupeny různými druhy slov – podstatnými jmény, adjektivy i slovesy. Jsou morfologicky jednoduché a často patří k odborné terminologii. Flektivní zpětné derivace jsou výsledkem odtržení skutečného nebo domnělého plurálového sufixu. Jsou to převážně slova jednoduchá a stylisticky neutrální.

Pennanenova typologie byla dále v této práci rozšířena o další typ zpětných derivací, a to adjektiva z konatelských substantiv. Tato kategorie je sice malá, avšak považují ji za nový typ, a to z několika důvodů. Za prvé, pro první období byla nalezena jedna potenciální jednotka: adjektivum *paratroop*. Jako potenciální ji označují proto, že informace o jejím původu se v různých zdrojích liší. MW's UD uvádí jako základové slovo *paratroops*, což je konkrétní substantivum v plurálu. Tyto charakteristika se však rozchází s tím, co je obvyklé u Typu VI z hlediska naší typologie: základové slovo pro zpětné utvoření adjektiva je zpravidla abstraktní substantivum. Random House Dictionary označuje jako základové slovo konatelské substantivum *paratrooper*. Dvojice *paratrooper* (n.) > *paratroop* (adj.) by pak mohla být klasifikována jako nový typ. Za druhé, v materiálu 2. poloviny 20. století byly rovněž nalezeny další relevantní jednotky, které mají některé společné rysy jako kategorie (zejména gramatické a stylistické). Navíc, v rámci zkoumání neologismů a z nich potenciálně možných zpětných derivací byla navržena jednotka další, která byla v následujícím kroku potvrzena jako existující v neformální komunikaci: *cruciverbalist* (n.) > *cruciverbal* (adj.). V důsledku těchto zjištění byla tato kategorie uznána jako samostatný typ zpětného tvoření a začleněna do typologie jako Typ VII. Zodpověděla jsem tak otázku položenou v závěru kapitoly 7.1.6, kde se objevila úvaha o možných dalších jednotkách této kategorie v druhém zkoumaném období, a tedy možném vytvoření nové kategorie zpětných derivací.

Naproti tomu však existuje jeden typ redukovanych slov, který do svého vzorku nezahrnuji, přestože se v literatuře objevuje názor, že jde o druh zpětného tvoření. Katamba (2006) tak překvapivě klasifikuje hypokoristika (zvláště domácí varianty osobních jmen v různých jazycích, např. *Iza* nebo *Zabe* místo *Isabelle* ve francouzštině) a popisuje tento proces jako krácení delšího slova o část, která nemusí být nutně afixem. Avšak, identifikování odtržené části jako afix (ať skutečný či domnělý) je podle mého názoru jeden ze základních principů zpětného tvoření, který tento proces odlišuje od jiných typů krácení. Toto jisté kolísání mezi pouhým krácením a zpětným tvořením se také odráží v části mého výzkumu, a to u vzorku předpokládaných avšak nepotvrzených zpětných derivací: tři slova jsou zde klasifikována jako typy na rozhraní mezi těmito dvěma procesy (*bilat* < *bilateral meeting*, *cat* < *catalytic converter* a *decaf* < *decaffeinated coffee*).

Všech devět kategorií zpětných derivací je v mé studii synchronně analyzováno a popsáno z hlediska morfologického, sémantického a stylistického. Uvedeny jsou také statistické údaje týkající se jednotlivých desetiletí, aby bylo možno sledovat postupný kvantitativní a kvalitativní vývoj tohoto slovo tvorného procesu v rámci celého období 20. a začátku 21. století. Pokud jde o množství jednotek ve druhém období (po r. 1960), je patrná klesající tendence směrem k současnosti, což je logické, neboť starší slovní zásoba je mnohem více stabilizována a nová slova přicházejí do lexikonu jazyka postupně a velmi pomalu. V důsledku toho jsou poslední dekady mnohem „chudší“ než začátek daného období.

V každé kategorii je materiál vyhodnocen jednotným způsobem v rámci následujících charakteristik:

- sémantická charakteristika základových a utvořených slov
- popis morfologické struktury zpětných derivací včetně identifikace podílu slov jednoduchých (jednoduchých derivací a mono-morfematických slov) a složených (dále rozdělených na složeniny celých slov a neoklasické složeniny)
- identifikace opakovaně zapojených afixů
- stylistická charakteristika všech jednotek

Na základě popisu a analýzy celého materiálu je v této studii podán podrobný výklad o vývoji tohoto slovotvorného procesu od začátku 20. století dodnes, provedeno srovnání vzorků dvou dílčích období a identifikovány nejtypičtější rysy zpětné derivace v současnosti. Tato analýza dále umožnila vyvodit závěry týkající se očekávaného dalšího vývoje zpětné derivace v nejbližší budoucnosti.

První polovina 20. století byla v produkci zpětně utvořených slov mimořádně aktivní. Lze ji považovat za dosud nejproduktivnější období. Vzorek slov vzniklých od roku 1960 až dosud je mnohem menší, ale nesmíme zapomínat, že kvantitativní srovnání nejpozdějšího období s obdobími staršími není příliš objektivní. Slovní zásoba staršího období je ustálenější a úplněji písemně zachycena. Dokazuje to i skutečnost, že například některé pozdější dodatky v rámci aktualizace OED4, které se vztahují ke slovům vzniklým v první polovině 20. století, byly zařazeny až v 90. letech nebo na začátku 21. století. Vzorek mapující současné období (1961 – dodnes) tvoří jednu třetinu materiálu za celé 20. století (229 slov ze 700). Musíme si však zároveň uvědomit, že původní vzorek zpětných derivací první poloviny 20. století shromážděný a popsáný Pennanenem obsahuje 225 slov, což je téměř stejný počet jako počet slov v mém vlastním vzorku reprezentujícím druhé období (229). Vysokého počtu (471) zpětných derivací pro první polovinu 20. století bylo dosaženo až díky mému dodatečnému vzorku pro stejné období, shromážděného v současnosti. Z toho vyplývá, že pokud se na tato čísla díváme z této perspektivy (tedy stejné, jakou měl Pennanen k dispozici v době své analýzy), můžeme považovat produktivitu zpětného tvoření za nezměněnou. Lze očekávat, že dnešní vzorek současných zpětných derivací může být podstatně rozšířen někým, kdo se rozhodne pokračovat v mapování vývoje tohoto procesu za čtyřicet nebo padesát let.

Tyto skutečnosti rovněž potvrzují můj předpoklad, že kvantitativní hodnoty vzorků by měly být srovnávány až s větším odstupem. Z tohoto důvodu je pro účely mého výzkumu účinnější srovnávat kvantitativní ukazatele pouze uvnitř jednoho období a synchronně, tj. v rámci jednotlivých typů a jejich kvalitativního popisu, například velikosti jednotlivých kategorií, frekvence zapojených afixů, převažující sémantické role nebo stylistické charakteristiky.

Nejproduktivnějším procesem v rámci zpětné derivace je tvoření sloves z dějových substantiv. Vysoká produktivita tohoto typu je příznačná pro celé 20. století a navíc, na základě mého výzkumu neologismů, lze usuzovat, že tato tendence v budoucnu ještě zesílí. V současnosti můžeme v podstatě hovořit o dramatickém nárůstu zpětného tvoření z dějových sloves ve srovnání s předchozím obdobím (z 37 % v prvním období na 55 % ve druhém). Tento trend se projevuje i ve vzorku nepotvrzených zpětných derivací (50 %) a dokonce i ve vzorku hypotetických zpětných derivací (50 %) a těch později potvrzených v neformální komunikaci (43 %).

Tvoření sloves z konatelských substantiv bylo v první polovině století poměrně aktivní, tvořilo 26 % všech zpětných derivací, avšak jeho podíl výrazně poklesl – na pouhých 14 % v současnosti. Zpětné tvoření sloves z adjektiv během 20. století téměř zaniklo a předpokládána

tendence do budoucna není rovněž příliš příznivá – žádné jednotky nebyly nalezeny mezi nepotvrzenými zpětnými derivacemi ani mezi potvrzenými potencionálními neologismy.

Adjektiva mohou být považována za menší zdroj zpětně utvořených substantiv, pravděpodobně s klesající produktivitou. Jejich podíl ve vzorku současného období je menší než ve vzorku první poloviny 20. století a ve vzorku neologismů nejsou zastoupena vůbec. Na druhou stranu však tato kategorie nejvýrazněji demonstruje, jak může pozdější výzkum stejného období (v tomto případě po 50 letech) změnit výsledky. Oproti Pennanenovu výsledku v 60. letech 20. století – 13 slov tohoto typu (Typ IV) pro první polovinu 20. století – se v dnešním vzorku pro totéž období nachází dalších 56 jednotek, což zcela změnilo pozici tohoto typu v celkovém materiálu první poloviny 20. století. Tato kategorie se stala třetí nejfrekventovanější. Vzorek druhého období (od roku 1961 dodnes) však už obsahuje pouze 24 těchto zpětně utvořených substantiv.

Ostatní typy představují v celkovém vzorku velmi malé podíly.

Z výzkumu materiálu celého 20. století i z prozkoumání neologismů vyplývá, že v rámci tohoto slovtvorného procesu narůstá tvoření ze složených základových slov a tento trend bude pravděpodobně pokračovat. Složené zpětné derivace představují v materiálu druhého období 55 % všech jednotek oproti 52 % v období prvním. Podobně je tomu i u vzorku potenciálních a potvrzených zpětných derivací, kde mají složeniny rovněž vysoký podíl.

Nejfrekventovanější odtržené sufixy jsou *-ing*, *-ion/-ation* a *-er*, přičemž všechny jsou zapojeny do tvoření sloves. Sufix *-er* ztratil svoji vedoucí pozici v celkovém pořadí, v prvním období se vyskytoval u téměř poloviny základových slov. V dalším období byl překonán sufixy dějových substantiv, samozřejmě v důsledku strmého nárůstu v této kategorii. Sufix *-ing* se stal nejfrekventovanějším sufixem v procesu zpětného tvoření v současnosti a podle jeho vysokého výskytu mezi nepotvrzenými a potenciálními a potvrzenými jednotkami můžeme usuzovat na pokračování tohoto trendu v budoucnosti. Zapojení dalšího sufixu, *-y*, se v druhém období mírně zvýšilo.

Výsledné zpětné derivace jsou stylisticky rozmanité, převažují neutrální jednotky. Vzorek dále obsahuje významný podíl odborných termínů a naučných slov, přičemž mnohá slova prezentovaná jako neutrální jsou svým významem, formou i omezením v užívání blízká odborné terminologii. Velké množství odborných termínů, zvláště sloves, odrážejí ve 20. století stejný jev, ke kterému v minulosti docházelo v obdobích nejbohatších na vznik zpětných derivací (polovina 17. století a 19. století): přejatá sufixovaná substantiva vyvolala v angličtině potřebu vytvořit příslušná slovesa, která pak vznikla v procesu zpětného tvoření. Příklady takovýchto zpětných derivací jsou slovesa: *hypocrise* (1680), *diagnose* (1861), *phagocytose* (1912), *physisorb* (1966). Pokud jde o regionální zabarvení zpětně utvořených slov, v současnosti dochází k mírnému nárůstu takových jednotek, největší zastoupení mají amerikanismy. Tato tendence je pokračováním podobné situace v první polovině 20. století.

Popis a analýza procesu zpětného tvoření v současném období i zkoumání neologismů ukázaly, že zpětné derivace vzniklé odtržením předpony, které obecně představují méně početný typ, stále vznikají. Naproti tomu typ flektivních zpětných derivací je blízko zániku, zdroje jsou zřejmě vyčerpány. Vývoj nových technologií, například v oblasti výpočetní techniky a elektronické komunikace, může však přinést zdroje nové.

Kategorie adjektiv zpětně utvořených z konatelských substantiv je novým typem, který by mohl ve svém vývoji pokračovat, tento závěr však vyžaduje ke svému potvrzení delší dobu.

Kromě výše uvedených hlavních výsledků odhalil výzkum několik dalších skutečností. Některé zpětné derivace, které Pennanen označil jako neexistující, avšak potenciální v době jeho zkoumání, tedy v první polovině 20. století, se od té doby ve slovnících již objevily (*job-hunt*, 1946, *teleprint*, 1971 a *skirt-chase*, 1981), a staly se tak součástí mého vzorku. Jsou dobrým příkladem neustálého pohybu v jazyce. Pennanenova predikce potenciální existence těchto zpětných derivací byla založena na stejných principech jako můj vlastní výzkum neologismů v rámci této studie, navržen 60 hypotetických zpětně utvořených nových slov a následně potvrzení 25 z nich (42 %) jako skutečně existujících v neformální komunikaci, nikoliv však ještě zaznamenaných ve slovnících. Mezi potvrzenými jednotkami mají absolutní převahu zpětně utvořená slovesa (17 z 25), z nichž většina vznikla z dějových substantiv. Více než polovina slov tomto vzorku jsou slova složená. Sufix *-ing* se vyskytuje u jedné třetiny základových slov. Stylisticky jsou potvrzené zpětné derivace samozřejmě na úrovni neformálního jazyka, jsou to často slova s humorným efektem, slova vytvořená ad hoc, ironická nebo slova použitá s indikací neobvyklosti (často písemně vyjádřené uvozovkami) a nemusí být v budoucnu všemi mluvčími akceptována. Tyto údaje jsou v souladu s hlavními výsledky výzkumu v rámci hlavních vzorků v materiálu této studie a naznačují směr pravděpodobného budoucího vývoje tohoto procesu. Potvrzení tak velkého podílu navržených hypotetických zpětných derivací dokazuje správnost, dobré fungování a všeobecnou použitelnost typologie a principů použitých v tomto výzkumu.

Pokud jde o hlavní cíl mého výzkumu zpětného tvoření – analýza a popis tohoto slovotvorného procesu v současnosti - můžeme shrnout jeho hlavní výsledky:

- Produktivita zpětného tvoření v angličtině zůstala na stejné úrovni, na jaké byla v první polovině 20. století.
- Nejproduktivnějším procesem zpětného tvoření v současnosti je tvoření sloves z dějových substantiv; ve srovnání se situací v první polovině 20. století lze hovořit o poměrně dramatickém nárůstu zpětného tvoření z dějových substantiv.
  - Zpětné tvoření sloves z konatelských substantiv významně pokleslo v produktivitě.
  - Zpětné tvoření sloves z adjektiv téměř zaniklo.
  - Adjektiva mohou být považována za menší zdroj zpětně utvořených substantiv, produktivita tohoto procesu má klesající tendenci.
  - Narůstá podíl složených slov účastnících se tohoto procesu; složeniny představují 55% v materiálu posledního období.
  - Nejfrekventovanější odtržené sufixy jsou *-ing*, *-ion/-ation* a *-er*, přičemž všechny jsou zapojeny do tvoření sloves.
  - Sufix *-ing* se stal v průběhu 20. století nejfrekventovanějším sufixem odtrženým při zpětném tvoření.
    - Stylisticky neutrální slova převládají, avšak jsou často omezena v užití.
    - Zpětné derivace vzniklé odtržením předpony stále vznikají.
    - Flektivní zpětné derivace téměř zanikly.
    - Kategorie adjektiv zpětně utvořených z konatelských substantiv představují nový typ, který by se mohl dále rozvíjet.
      - Pokud jde o očekávaný vývoj v budoucnosti, převaha Typu II (slovesa z dějových substantiv) bude pravděpodobně trvat – jde o nejsnadněji fungující proces. Produktivita Typu IV (substantiva z adjektiv) bude pravděpodobně mít dále klesající tendenci. Totéž platí pro Typ I

(slovesa z konatelských substantiv): zdá se, že jeho produktivita klesá, zřejmě v důsledku konkurence s Typem II. Frekvence sufixu *-ing* roste, sufix bude pravděpodobně stále více zapojen do procesu zpětného tvoření. Stylisticky neutrální slova budou pravděpodobně tvořit největší podíl zpětně utvořených slov, avšak odborné termíny a naučně zabarvená slova představují rovněž významný potenciál v daném procesu.

V této chvíli je důležité zdůraznit, že výzkum zůstává otevřený. Nabízí další možnosti pokračování ve studiu a analýze zpětného tvoření. Jak se ukázalo, situace v určitém období může být viděna odlišně z pohledu časově blízkého nebo z časového odstupu. Přehled zpětně utvořených jednotek druhé poloviny 20. století bude o několik desetiletí později určitě jiný, neboť slova, která jsou dnes hypotetická, se mohou stát skutečnými, a naopak některá mohou z lexikonu zmizet. Mimojazyková skutečnost může rozhodným způsobem ovlivnit směr tohoto procesu. Jako příklad takového vlivu může sloužit prudký pokles podílu konatelských základových substantiv ve prospěch substantiv dějových při zpětném tvoření sloves v reakci na rostoucí dynamičnost současné společnosti.

Jednou z možností je prozkoumání jiných zdrojů materiálu než těch, které byly použity v této studii, například takových, které obsahují více odborné terminologie, nebo jiných specializovaných slovníků (např. slangových nebo regionálních), nebo akademických projektů týkajících se neologismů, které mohou poskytnout další materiál a umožnit ještě důkladnější zkoumání současné situace. Další úkol může být spatřován ve výzkumu současné slovní zásoby zaznamenané ve slovnících a navržení potenciálních zpětných derivací, které by mohly vzniknout ze stabilnějších, delší dobu zaznamenaných jednotek vhodných k takové hypotéze. Mohla bych také pokračovat ve výzkumu prozkoumáním Britského národního korpusu, nebo i jiných korpusů, a zjistit, jak pevné postavení mají v praktickém užití jazyka dnes identifikované zpětné derivace z posledního období.

Výzkum v rámci této práce potvrdil, že zpětné tvoření může být považováno za průhledný, analyzovatelný a produktivní slovotvorný proces, který má potenciál pro další vývoj v budoucnosti. Relativně velký počet slov nalezených v období po Pennanově výzkumu, stejně jako vysoké procento slov potvrzených ve vzorku potenciálních zpětných derivací z neologismů dokazují, že lze plně souhlasit s Pennanovým tvrzením, že zpětné tvoření zaujímá důležité postavení mezi moderními procesy anglické slovotvorby. Pokud však vezmeme v úvahu jeden z hlavních výsledků tohoto výzkumu, že z kvantitativního hlediska zůstala produktivita zpětného tvoření za celé zkoumané období (od r. 1900 dosud) na stejné úrovni, můžeme i nadále považovat zpětné tvoření za jeden z minoritních slovotvorných procesů. Toto rozhodnutí je poněkud komplikováno několika skutečnostmi: jednat tím, že ke zpětnému tvoření takřka nedochází uvědoměle a že běžní uživatelé jazyka jej prakticky nejsou schopni rozpoznat, dále pak faktem, že mezi zpětnými derivacemi existuje řada slov, u nichž i lingvisté váhají mezi dvěma možnými slovotvornými procesy, zpětným tvořením a analogickou kompozicí. Všeobecná tendence mluvčích preferovat snadnost, přehlednost a pohodlnost při užívání jazyka může být rozhodujícím faktorem, který bude patrně vždy udržovat zpětné tvoření v kategorii méně obvyklých a okrajových slovotvorných procesů.

## SUMMARY IN ENGLISH

The objective of the present study is to provide a comprehensive description and analysis of English back-formation (BF) in the 20<sup>th</sup> and the beginning of the 21<sup>st</sup> century.

The comparative research of the situation in the Czech language has revealed that a morphological process that would be entirely identical to English BF does not exist in Czech. There is, nevertheless, a phenomenon in Czech that can be loosely referred to as BF, but the word-formation types involved are different from those formed in English BF.

The description and analysis of English BF is based on the total sample of more than 700 items. The material collected has been classified into nine types according to several aspects, the most important one being the part of speech of both the resulting and the source word. This typology derives from the typology established by Penanen (1966), whose classical study is the methodological point of departure of the present research. The description takes into account semantic characteristics of the words, their morphological structure, involvement of repeatedly occurring suffixes, and stylistic value of all items. In addition, the study presents a new method of identification of BFs: 60 hypothetical BFs were suggested - items not attested in the dictionaries but having all the makings of future BFs formed from neologisms by this process. Using contemporary live informal communication on the Internet as feedback it was possible to establish that out of the 60 hypothetical words 25 had been actually used by English speakers / writers.

The major results of the research can be summarized in the following way:

Productivity of BF remains at the same level as it was in the first half of the 20<sup>th</sup> century. The most productive process within BF is the formation of verbs from action nouns. BF 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. There is a growth in the participation of compounds in this process; they represent 55 % in the sample from the latest period. The most frequent subtracted suffixes are *-ing*, *-ion/-ation* and *-er*, all of them being involved in the formation of verbs. Suffix *-ing* has become the most frequent suffix subtracted in BF. Stylistically unmarked items prevail, but they are often limited in use. Prefix BFs continue to be formed. Inflectional BFs seem to be on the decrease. The class of adjectives back-formed from agent nouns is a new type that might continue in occurrence. As far as the expectations for the future are concerned, the predominance of formation of verbs from action nouns will probably continue – it is the most easily functioning process. Formation of nouns from adjectives will probably decrease in productivity. The same applies to verbs from agent nouns. The suffix *-ing* is growing in frequency. Stylistically unmarked words will probably form the main volume of back-formed words, but technically and scientifically marked words also have high potential in the given process. Compounds will probably become a more frequent source (and so the result) of BF.

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. On the other hand, 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.



## **ENGLISH BACK-FORMATION: RECENT TRENDS IN USAGE**

A comprehensive study of English back-formation in the 20<sup>th</sup> and the early 21<sup>st</sup> century

PhDr. Naděžda Stašková, Ph.D.

Recenzenti: MA. PhDr. Stanislav J. Kavka, Ph.D., CSc.  
prof. PhDr. Aleš Klégr

Grafický návrh obálky: Andrea Stašková

Vydavatel: Západočeská univerzita v Plzni, Vydavatelství  
Univerzitní 8, 306 14 Plzeň  
tel.: 377 631 951  
e-mail: vydavatel@vyd.zcu.cz

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