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English Back-Formation in the 20th and the Early 21st Century

Zpětné tvoření v angličtině ve 20. a na začátku 21. století

Disertační práce

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Drahlažvii. Ža isam disartažní prási papsala samost	stně a vyvyžitím nouzo vyodoných a žídně
"Prohlašuji, že jsem disertační práci napsala samosta citovaných pramenů a literatury a že práce nebyla vy studia či k získání jiného nebo stejného titulu."	vužita v rámci jiného vysokoškolského
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ABBREVIATIONS

adj. adjective Am. American

attrib. attribute, attributively

Austr. Australian c. circa

COD 9th Concise Oxford Dictionary 9th Edition
COD 11th Concise Oxford Dictionary 11th Edition

colloq. colloquial

DARE Dictionary of American Regional English
D.com Dictionary.com Unabridged; Random House, Inc.
D.com 21L Dictionary.com's 21st Century Lexicon

esp. especially f. from fig. figurative

index number (as in *escalate*²) number of meaning of the word

intr. intransitive

MW's 11th CD Merriam Webster's 11th Collegiate Dictionary MW's UD Merriam Webster's Unabridged Dictionary

n. noun

N.Amer. North American NZ New Zealand occas. occasionally

OED4 Oxford English Dictionary (version 4.0)

orig. originally pl. plural

ppl. participle, participlel pres. ppl. present participle

prob. probably

RHUD Random House Webster's Unabridged Dictionary

sl. slang spec. specifically sth. something tr. / trans. transitive

transf. transferred (meaning)
U.K. United Kingdom
U.S. United States
usu. Usually
v. verb
vbl. verbal

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INTRODUCTION: BASIC CONCEPTS, METHODS AND AIMS

Apart from the major processes of word-formation, such as derivation (affixation), compounding and conversion, there are also some other processes in the English language which may seem to be rather marginal, less important or at least unusual. The present work deals with one of them – back-formation (also called back-derivation, retrograde derivation or deaffixation).

Back-formation 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). 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 back-derivation 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 back-formation 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 used examples is the pair editor > edit, where the verb has been formed from the noun by back-derivation – 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 back-formation 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 back-formation in English is still productive.

In the research, description and analysis of our collection of material, we based our approach, 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 back-formation in the following way: "Back-formation or retrograde derivation is a kind of inverted or reverse derivation. Normally, derivation means the formation of new words from existing ones by means of affixes (prefixes, infixes, or suffixes). Back-formation works in the opposite direction, i.e. from what is, or looks like, or is taken for a derived form, backwards to the 'root', which does not really exist' (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 13th century) and described and analysed the process from both diachronic and synchronic points of view.

The present work concentrates its attention on the latest development, i.e. description and analysis of back-formation in the 20th and at the beginning of the 21st century, combining diachronic and synchronic views. In our research, we have proceeded through the following steps:

- 1. The study of relevant linguistic literature and extraction of the most useful ideas for the further study and research.
- 2. Collection of material back-formed words 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 21st 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 our collection).
- 3. Classification of the material according to Pennanen's typology, extended by three other categories as a result of the present research, and their detailed synchronic description from several points of view: quantitative, semantic, morphological and stylistic (in the analyses of the internal structure of the words, compounds have been identified according to the number of roots; a fairly large number of compounds contain combining forms; therefore, in the analyses of the morphological structure we have further distinguished full-words compounds, neoclassical compounds, derivatives and monomorphemic words).
- 4. Description and analysis of the development of back-formation in the first period (1900-1960), based on Pennanen's sample of 225 items and on an additional sample of another 246 items identified in a set of dictionaries for the given period in our research.
- 5. Description and analysis of the development of back-formation in the second period (from 1961 up to the present time), based on material excerpted from dictionaries and both printed and on-line collections of neologisms.
- 6. Description and summary of the most significant features of back-formation at present, based on the analysis of the material of the given period and on the results of its comparison with the previous situation.

- 7. The study of several sources of neologisms and identification of potential source words and their potential resulting back-formations in the future.
- 8. Presentation of those originally potential back-formations which have been confirmed as existing on the level of occasional, ad hoc, jocular, ironic or highly informal conversation and used by participants of informal discussions on the Internet.
- 9. Summarizing the development of the given phenomenon over the whole 20th century and the beginning of the 21st century and characterization of the main contemporary tendencies of this process.

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

PART I: THEORETICAL BACKGROUND

1. THE RELEVANT TRENDS IN MORPHOLOGY IN THE 20^{TH} CENTURY

The views on English back-formation, 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 20th century. It may therefore be useful to give a brief account of these.

Quite clearly, the development of 20th century morphology cannot be separated from the development of modern linguistics and its main stages. On the other hand, not every trend in 20th 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 (1882–1946), 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 19th 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 20th 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 20th century is Hans Marchand (1969), who had by 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.

2. 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 back-formation 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 back-formation 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 abgeleten 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 back-formation (1942, pp. 537-538) and makes references to it in several places. For Jespersen, back-formations (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 back-formation 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 Penannen

(1966). As, in fact, most of what has been written afterwards can be found in these two works, they deserve special attention. Pennanen'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 backformation 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 backformation 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 back-formation, between historical connection and derivational relationship. When dealing with examples of back-formation, 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 backformation 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 backderivation (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. 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 back-formation within the section on verb compounds, stating that these patterns are difficult to separate from each other. Back-formation 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 back-formation: "...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

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¹ This approach is also applicable to some back-formations introduced by Pennanen (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', *outrig*: 'to finish with outriggers', *wire – pull*: 'to actuate or promote by wire-pulling', etc).

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 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 back-formation 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 back-formations 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 backformation 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, giftwrapped) 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 back-formation, 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, back-formation takes place (*fluoresce*, *diagnose*).² Adams closes her discussion of back-formation by its comparison to other, considerably more 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 back-formation is of diachronic relevance only. He defines back-formation 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). Back-formation, 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 back-formation 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 back-formation 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 back-formations represented by the classic example *pea < peas*. In order to

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² Adams (referring to Pennanen, 1966) describes the situation in the historical periods of peaks in recorded backformations, 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.

involve all possible types of this process (including inflectional back-formations and back-formations 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, back-formation 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, cohese and self-destruct are evidence of such deleting. As a result, he prefers to classify back-formation as a special case of clipping. Bauer continues holding this opinion also in his monograph Watching English Change, 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. Back-formations 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 back-formations are not counted separately, but together with clippings, this result shows the trend in vocabulary development - back-formations are still a productive way of word-formation. Finally, in his glossary of morphology (2004, p. 21) he stresses that back-formation "is one of the major processes by which compound verbs are formed in English, for example to baby-sit from baby-sitter."

CGEL (Quirk at. al., 1985) takes 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 back-formation 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 back-formation 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: defreezed / defroze. This relexicalization is akin to back-formation (1985, p.1579).

In his brief survey of word-formation processes, Katamba (1994) highlights three properties of back-formation: 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 back-formation 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 13th 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 back-formation 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 backformed 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 back-formations – 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 back-formation 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 back-formation, 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 resuffixation (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 back-formation 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 back-formation 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 backformation 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 back-formation, together with borrowing, loan translation, onomatopoiea, 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 back-formation. However, in the case of back-formation, 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 /ər/ 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 back-formation is not a derivational process. Firstly, although the rules operating in backformation seem to be regular and predictable, many potential back-formed words are not acceptable (e.g. butcher > *to butch, 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 back-formation, 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 (3rd edition, 1996) he felt it important to update Fowler's original definition (1926/2009) of backformation 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 back-formation 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 16th to the 20th 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 back-formation is adopted by Stekauer, who discusses back-formation 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 back-formation 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 back-formation is indeed based on a specific theory which is probably not in agreement with "traditional" explanations of the phenomenon of back-formation. 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 back-formation 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 backformation is, in our opinion, suffixation of a <u>noun</u> followed by back-formation resulting in a <u>verb</u> 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 ours 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*. We attach weight to the strong influence of analogy with the class of verb-agent pairs, therefore we do not presuppose an actualization of an early postulated verb but formation of a completely new, missing item of vocabulary.

Back-formation 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 back-formation in the 16th century and a brief survey of six Pennanen's productive patterns³.

Mel'čuk (2000) discusses back-formation 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-

³ 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.

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 backformation (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. Back-formation (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 backformation, 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 synchonically 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 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 back-formations. His arguments are as follows (p. 583): "Morphological processes are synchronic. This excludes diachronic shortenings such as back-formation (also called backderivation 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 back-formation. In Haspelmath's view, "The word-based model can explain how backformations (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):

$$[/X/_{V} 'do'_{X}] \leftrightarrow [/Xer/_{N} 'a person who (habitually) does_{X}']$$

....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), back-formation 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 spoonfeed, 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 back-formation 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 back-formation, 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 back-formation 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 back-formation, 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 \leftarrow 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). When dealing with verbal compounds. Plag points out that the majority of them are best analyzed as the result of a backformation or conversion process, introduces several examples of back-formed verbs: proofread, 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

⁴ In the material collected in the present research for the second half of the 20th century, an example of such type is a fairly recent noun *un-hero* (1989) from *un-heroic* (adj.) (Ayto, 1990)

dictionaries. On the other hand, verbs of this type may be the result of back-formation 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, back-formation is more acceptable: decompensate < decompensation, hyperventilate < hyperventilation (OED4).

Booij (2005) describes back-formation 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 back-formation 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.

Back-formation 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* > *pedle* to children's (logical) 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 back-formation is clearest when a form is created to underlie a borrowing. He does not consider the dates of first record reliable in identifying back-formations, 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 16th 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 back-formation, he summarizes attitudes of various authors (Plag 2003, Greenbaum 1996, Bauer 1983, and others) and generally comes to the conclusion that the authors devoted to this matter only a small chapter or even part of one. He mentions Pennanen's classic study Contribution to the study of back-formation (1966) as the main authority in the field of back-formation 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 back-formation 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 back-formation 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: bootlick (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 backformation 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 back-formation in their spoken components, others (Philippines, East Africa, New Zealand) make use of back-formation in their written components. Back-formations 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 backformations 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*. 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 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 we have presented various approaches to back-formation in the literature. To briefly summarize, the most frequent features that most of them discuss are

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⁵ 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).

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 has dealt with back-formation probably more 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 work, of which Pennanen's study forms the methodological starting point. Therefore, we believe that Pennanen's contribution to the study of this phenomenon deserves to be given a separate chapter.

3. BACK-FORMATION ACCORDING TO PENNANEN

Esko V. Pennanen gave a profound description and analysis of back-formation 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 back-formation over time, from the 13th century till the early 1960s and at the same time he identifies and defines the productive types of back-formation and the role of back-formation 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 Backformation had been usually a subsidiary topic of a specialized study, mostly on denominative verbs" (p. 29).

His investigation is carried from the Middle English period, after the 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 the theoretical chapter, Pennanen summarizes different angles from which the concept of back-formation has been approached, starting in the first third of the 19th century with Philipp Buttmann's (1829) hypothesis of a derivation where the shorter word is derived from the longer, the fuller one. Among authors that he mentions an interesting one is, e.g., Karl Brugmann (1904), a German linguist, who demonstrated that back-formations are common to all Indo-European languages. Another author mentioned is Kristian Sandfeld-Jensen (1923), who speaks of retrograde derivation in connection with the false analysis of word elements, namely the ending (*sideling* > *sidle*) and the relation between the word-stem and the ending (*housekeeper* > *housekeep*). Pennanen disagrees with Franz Brender's (1920) assertion that, by this process, speakers deliberately fill gaps in vocabulary or in paradigm arguing that true analogical formations are unconscious, while he is in agreement with Henry Bradley (1904), who introduces all the important factors: the moment of analogy, the

direction and nature of the process (the unconscious creation), its technique (depriving) and the level of speech (popularly), although his examples are limited to denominal verbs, and he also includes instances in which "an ending common to a group of words has been treated as a separate word, e.g. *isms*, *ologies*, etc." (p.23). Pennanen describes the approach of Otto Jespersen (1894), one of the first authors who dealt with back-formation in English, classifying back-formation under a more general category, subtraction — as a purely formalistic arrangement. Jespersen classifies back-formation as a subcategory of shortenings, emphasizing that the subtracted element is not an independent word, it is a sense-modifying element, and back-formation always presupposes a re-interpretation, which he calls metanalysis. The resulting shortenings often lead to a new word belonging to another word class.

Furthermore, Pennanen emphasizes a certain contribution to the study of back-formation by Bladin (1911), who discussed the borderline between back-formation and elliptical shortening on the one hand and conversion on the other. In addition, Bladin distinguished between inflectional back-formation (subtraction of plural -s) and the ordinary back-formation, involving a semantic element.

In his historical survey of important scholars, Pennanen also shortly summarizes the studies and approaches in the USA. Finally he draws attention to two essential works on English word-formation: Herbert Koziol's *Handbuch der Englischen Wortbildungslehre* (1937), (where there is a chapter on derivation by back-formation introducing a formalistic definition of back-formation and in which the author draws attention to the role of back-formation in other related types of word-formation, especially in the derivation of English verbs from Latin past participles), and Hans Marchand's *The Categories and Types of the Present-Day English Word-Formation* (1960, 1969), which he considers to be the first to interpret the phenomenon of back-formation in terms of modern linguistics.

In his description of back-formation, 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. Back-formation 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 backformation 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 backformed 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 back-formations in literature. Based on Brender (1920), Jespersen (1942) and other authors, he makes the following conclusions: Inflectional back-formations (pea < pease, decimvir < decemviri) should not be included into the category of back-formation 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 back-formation, 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 back-formation cases of syntactic ellipsis (orient < orient pearls) and he explains the distinction between back-formation 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 back-formations 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 "backformation 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 back-formation, 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 back-formation are two different processes.

Finally, Pennanen recalls two recent methods of dealing with back-formation – those of Marchand (1960) and Hall (1956). Marchand prefers the term back-derivation "to stress its derivative character", which Pennanen considers as a highly useful innovation in terminology.

Hall (1956) classifies back-formation as part of so-called noun-incorporation, which Pennanen refuses, explaining his opinion in the following way: "...this manner of classification is off the mark as it only concerns back-formations from compound primitive forms (Marchand uses the term pseudo-compound verbs for them) thus leaving simplicia outside its scope, and it would not comprise such 'compound' formations as have and adjective or an adverb as first element" (p. 43). In Pennanen's opinion, only one type of backformation can be placed under the heading of noun-incorporation.

One 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 20th 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 back-formation 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 form the Latin past participle *editus* and back-formation, respectively), and he comes to the conclusion that both meanings may have been the results of back-formation 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 back-formation 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. Bangs⁶.

Making general remarks on the history of back-formation, 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 19th century" (p. 87). The factors explaining this later occurrence of back-formation are above all strong influx of foreign words into English and the loss of inflections after the middle of the 12th 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 back-formation 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 back-formation.

Pennanen describes the emergence of back-formation as roughly conforming to the influx of new words in to the language; on the other hand, he explains the reason why back-formation 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 back-formations before the 19th century. The first significant peak was in the middle of the 17th century; in the previous period, the main means of forming new verbs was conversion, which led to a reduced need for reliance on back-formation. One of the main factors in the steep rise in the occurrence of back-formations in the 19th and 20th 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, back-formation corresponds well with this 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 back-formations are concerned, Pennanen draws several conclusions:

- 1. Back-formation 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 back-formation, because

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⁶ 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.

- such verbs would be suffix-formed verbs only while majority of verbs are directly convertible.
- 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 back-formation.
- 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 premodifiers 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 back-formation:

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 back-formation 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 > to 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 19th and 20th 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 back-formation 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 14th century, but the highest occurrence of this pattern is found in the 19th century and continues in the following one.

Type III, on the other hand, shows the opposite trend in appearance – the verbs formed by back-formation from either participial adjectives in *-ed* or *-ing* or adjectives with other suffixes are the most numerous during the 16th, 17th and 18th 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 back-formation 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 back-formation (*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").</p>
- 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 bahuvrîhi-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 back-formation – 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 back-formations 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 back-formations of Type V, perhaps because of the semantic polarity of the two words. We agree that this pair is essentially different than plosive < explosive, which really appears to be a mere shortening⁷. However, the pair *sipid*< *insipid* is actually the only case of a prefix-based back-formation 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 our 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

⁷ A similar example is the pair *pheresis* < *apheresis* (1975). MW'sCD, however, introduces *plasmapheresis* as the source word and labels *pheresis* as informal. In the pair *pheresis* < *plasmapheresis*, the relation between the items is not shortening, nor change of polarity, but hyponymy, as there are other sorts of pheresis: leukapheresis or plateletpheresis.

is back-formed from an abstract substantive, adverb *or another adjective*, whose basic word it is supposed to be" (p. 84). In the present work, we have collected several examples of prefix-based back-formations 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 back-formation 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 backformation 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 back-formation, 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, back-formation 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 back-formation verb of the same type.

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

The three processes (conversion, compounding and back-formation) 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 back-formation *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-chase*, *job – hunt < job-hunting*, *war-separate < war-separated.

In this connection, the author mentions so-called partial back-formations – 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

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⁸ 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.

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 back-formation; he emphasizes the importance of the share of back-formation 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).

Pennanen also draws attention to the fact that back-formation 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 back-formation. 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 back-formation from deverbal nouns in *-tion* and *-ation*, which were often much earlier in appearance that 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.

Back-formation 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 back-formation, 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 back-formation by Marckwardt (1958); vacate (1643) in its American use "to spend a vacation" is apparently a back-formation from the noun vacation (1456).

Special attention in the monograph is devoted to the principal question: why are back-formations formed? The author analyses the motive forces that have taken share in the overall motivation for back-formation 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 back-formation 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 back-formation 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, *taxpay⁹ 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

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⁹ 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.

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-work¹⁰, 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, back-formations 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, inventive or creative flavour to their ideas – the newspaper style is a typical fruitful environment for coining back-formations. On the other hand, newspaper reporting is not the only area of life where back-formations 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, backformations 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 back-formations and what use they have made of the back-formations introduced either by themselves or by others. He mentions some well-known authors and the back-formations 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 several main points:

- 1. Back-formation 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.
- 2. 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.

no-thanks.aspx); accessed on 31March 2011.

¹⁰ 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.*" (https://www.autocar.co.uk/blogs/designlanguage/archive/2007/10/17/led-running-lights-

3. A back-formation 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 back-formations 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 butch* (backformation) 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*¹¹. 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* (back-formation 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 back-formation 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 back-formation, 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 back-formations are of American origin. Finally he says: "In modern times the dissemination of novelties in language takes place on a

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¹¹ 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 31March 2011). However, the meaning is transferred and the link between it and the noun *butcher* is not reliable at all.

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 back-formations 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 an 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 back-formations become accepted into use on the various levels of the language, the more new back-formations 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 back-formations over the centuries, there is a considerable difference between early and later back-formation: 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 back-formations more words have fallen out of use than survived. The older stratum of composite back-formations, on the other hand has survived surprisingly well (*backbite, housewarm, kidnap*, etc.).

The more recent layer of simplicia-based back-formations 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 back-formations 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. Back-formation 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):

- Back-formation is based on the inverted function of the relation pattern of a radical word and its derivative.
- Back-formation 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 back-formation is analogy of patterns. However, back-formation is not merely formal; central role of the semantic element should be borne in mind.
- The result of back-formation 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 back-formation. If the change of the word-form is not complete, we get a partial back-formation, whose use is limited to certain forms only, or categories of formal or grammatical back-formation which produces new forms or variants of existing words, and semantic back-formation, which reflects additional meanings back to the basic word from a derivative.
- Back-formation 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.
- Back-formations are normally not recognized as such by the average speaker. He regards them as 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.
- Words resulting from a recent back-formation 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 back-formation 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 back-formations 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.
- Back-formation is playing a prominent role among the modern processes of English wordformation.

4. BACK-FORMATION IN THE CZECH LANGUAGE

It should be stressed that back-formation 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 we thought it important to explore even this aspect and compare back-formation 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 back-formation 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 back-formation 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.

4.1 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: *ujařmit* > *jařmit*, *poslat* / *posílat* > *slát* / *sílat*, *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.

4.2 Desuffixation – searching for comparable types

4.2.1 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 wastac (from German, "bag"). It was borrowed into Czech as $vac{c}ek$, then, analogically after the type $rak > rac{c}ek$, $mrak > mrac{c}ek$, 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	wâtsac – from German editor – from French		
2.	the borrowed source word, adjusted to the native language, appears to be morphologically complex	váč-ek edit-or		
3.	application of analogy with formally similar types in the native language	váček : ráček : mráček editor : creditor : actor		
4.	desuffixation: the result is a word morphologically simpler, formally shorter	váček > vak editor > edit		
DI	FFERENCES			
1.	Czech: the source and the newly-formed word	diminutive noun > noun		
	belong to the same part of speech English: the source word and the newly-formed word belong to different parts of speech	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.: sculptor > sculpt, butler > butle, peddler > peddle, beggar > beg, burglar > burgle		
3.	unlike Czech, this type of word-formation	e.g.: expletive > explete lazy > laze, recycling >		
	applies also to other word-formation types and	recycle, reminiscence > reminisce, television >		
	suffixes in English	televise, therapist > therap		

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

4.2.2 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 back-formation pair which functions as the source word (*house-keeper*):

dřevo·rub·ec	components: noun (<i>dřevo</i>) + suffixed noun (<i>rubat</i> > <i>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
house•keep•er	components: noun (house) + suffixed noun (keep > keep·er); 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 keeper of a house, but e.g. a keeper in museum / library / zoo); 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:

 $d\check{r}evorubec > *d\check{r}evorubat^{12}$

This would correspond to back-formation, 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 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 back-formation. 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 back-formation either, but of composition, involving combining forms *znovu*-("again") and *spolu*- ("together").

http://www.rcfogli.cz/modules.php?name=Forums&file=viewtopic&p=26361; accessed: 9 April, 2011)

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¹² 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

4.2.3 Formation of Czech verbs from borrowed action nouns

There is, however, another process which deserves attention as it resembles backformation 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 we mean by this process is the additional formation of verbs in the Czech language from borrowed action nouns which have been borrowed as a whole (and orthographically adjusted). These are nouns borrowed from various languages, e.g. from German (verbuňk > verbovat, "recruit"), Latin (verbuňk > verbovat, "recruit"), Latin (verbuňk > verbovat, "report", verbovat, "agitate, campaign", verbovat, "abstrakce verbovat, "abstrakce", verbovat, "abstr

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

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-semantized (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.

4.2.4 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 back-formation. 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"; $carving > k \acute{a}rvovat =$ "to ski on carving skis, to use the carving technique", etc. (Stašková, 2008).

4.3 Further cases of desuffixation in Czech

4.3.1 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 $-n\dot{y}$
- 2. the complex stem of the source adjective loses the last stem-forming suffix -n- (+ ending): $mizer \cdot n\acute{y} > mizer$ -
- 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: čipera, 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: nelida, 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 backformation, 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. $h\check{r}ib\check{e} < h\check{r}eb\cdot ec$.

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: arzén (< arsen·icum)

4.3.2 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 *boháč* < *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 - \dot{y}): $boh \cdot at\dot{y} > boh$ (= the return to the root).
- 3. Addition of a new word-formation suffix resuffixation: boh·áč.

The suffix $-\dot{a}\dot{c}$ formations, especially nouns referring to persons of certain characteristics from the primary stems of adjectives, are mainly derived by the suffix $-at\dot{y}$, or -nat \dot{y} , 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 $-\dot{a}k$: 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), maloměšťák (< -ský), paličák (< -atý); things, meals: $nul\acute{a}k$, $brambor\acute{a}k$ (< $-ov\acute{y}$), $bur\acute{a}k$ (< $-sk\acute{y}$), $d\check{r}ev\acute{a}k$ (< $-\check{e}n\acute{y}$), $zim\acute{a}k$ (< $-n\^{i}$); metaphorical names of films ("tearjerkers"): slaďák, doják (< -ký, -emný¹³); names of drinks: ležák (< -ící) – "lager"; metaphorically also referring to goods not selling well ("lying"). Other suffixes in this group are -as: prud'as, klid'as (< -ký, -ný) – a person of a certain disposition; klad'as (< 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 - výstřižek, skrojek (< -ený); -ina: persons - dětina (< -inský), geographical places - rovina (< -ný), hlubina (< -oký), nížina, hladina (< -ký); woods – dubina, bučina (< -ový), things – pružina (< -ný), materials – sladina, kapalina (< $k\acute{v}$, $-n\acute{v}$); attributes - doktořina, krejčovina, haškovina, švejkovina, bláznovina (< $sk\acute{v}$) - 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 (< -ni); 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 $-\acute{a}k$, 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 ($<-av\acute{y}$), slizoun ($<-sk\acute{y}$).

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

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 $^{^{13}}$ "Doják" is apparently formed analogically after "slad'ák" but here back-formation is followed by one more process – clipping; so: dojemný (adj.) > dojem (n., = back-formation) > doj- (=clipping) > doják (= resuffixation)

houses, cotttages: -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·ík), vápenatý (< vápn·ík).

Examples of adjectives derived by resuffixation from adjectives: comparatives -si, kratsi, dalsi, hlubsi, sirsi, etc. $(<-k\acute{y},-ek\acute{y},-ok\acute{y})$; diminutive adjectives $-ounk\acute{y}$, $-oučk\acute{y}$: $kratounk\acute{y}$, $nizoučk\acute{y}$, $droboučk\acute{y}$ $(< k\acute{y}, -n\acute{y})$; intensifying adjectives $-ánsk\acute{y}$: $ukrutánsk\acute{y}$, $hrozitánsk\acute{y}$ $(<-n\acute{y})$.

Examples of adjectives derived by resuffixation from adverbs – the last vowel of the adverb (indicating the part of speech) is subtracted: -ejši: tehdejši ($< tehd\cdot y$), protějši ($< prot\cdot i$), včerejši ($< včer\cdot a$), -ni: dolni ($< dol\cdot e$).

Examples of adverbs derived by resuffixation from adverbs: comparatives -eji, -ĕji: šířeji (< 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 ($krot \cdot k\acute{y}$), hubnout ($krot \cdot k\acute{y}$); indicating change of state of the patient -it: krotit, sladit ($k\acute{y}$).

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).

4.3.3 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): $kup \cdot ova \cdot t$ ($kup \cdot uje$).

- 2. The removal of the stem-forming suffix produces the root: $kup \cdot ova \cdot t > kup$.
- 3. The root is expanded by the word-formation suffix and the result is a derived word (resuffixation): $kup \cdot ec$

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: $koup \cdot it > kupovat$, $rozděl \cdot it$, roz

4.3.4 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 resuffixed. 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), očař (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): dvoudvéř, třídvéř, čtyřdvéř and pětidvéř. 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.

4.3.5 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 at 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 stemforming 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. Mališ, 1999).

If we recall the two conditions for the inclusion of the Czech word-formation processes in the list of processes comparable with English back-formation (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: $zl\acute{y} > zle$ (= adj. > adverb), or by the addition of the verbal stem-forming suffix: $ly\check{z}e > ly\check{z}ovat$ (= 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: $honit > hon\emptyset$ (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 \emptyset 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) modr'y > modr': derivation of a noun from an adjective by subtraction of the part-of-speech suffix and its substitution by \emptyset suffix. There is sound alteration in the root.

Other examples according to the word-formation type include agent nouns: $zv\check{e}d\check{e}t > zv\check{e}d$ (to spy > a spy), $\check{s}pehovat > \check{s}peh$ (more often connected with composition: lidojed, $d\check{r}evokaz$, $darmo\check{s}lap$); 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: $l\acute{e}\check{c}it > l\acute{e}k$, $zamknout > z\acute{a}mek$, brzdit > brzda; names of persons of a particular character converted from compound nouns (bahuvrîhi): $rudovous\acute{y}$ $mu\check{z} > rudovous$ (red-bearded man > Redbeard); names of places converted from adjectives: $pust\acute{y} > pou\check{s}t$, $such\acute{y} > sou\check{s}$; names of actions converted from verbs: $sko\check{c}it > skok$ (to jump > a jump), hodit > hod, $sout\check{e}\check{z}it > sout\check{e}\check{z}$; names of actions converted from prefixed verbs: $p\check{r}ehodit > p\check{r}ehoz$ (to cover > a cover), $vydr\check{z}et > v\acute{y}dr\check{z}$.

4.3.6 Mechanical shortening

Some other cases could seem to fulfil the two conditions for back-formation, 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.: $u\check{c}itelka > u\check{c}a$, $krimin\acute{a}l > krim$, nashledanou > nashle, $Magdal\acute{e}na > Magda$, mobilni (telefon) > mobil, etc. This word-formation process is essentially identical with clipping in English.

4.4 Summary and conclusion

Based on the above description of Czech word-formation processes which are marked by at least two features assumed to characterize back-formation (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 back-formation (as in English), but the word-formation types involved are different from those formed in English back-formation.

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 (vak) 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 (dřevorubec) 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 backformation 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 to15 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 > harašeni > harašeni). The verbs formed in such a way are mostly slang or colloquial and they are not entirely established in the Czech vocabulary yet.

Back-derivation is represented in Czech word-formation, above all, by desuffixation accompanied by the change of formative characteristics. While the result of back-formation 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 back-formation 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) > tělák, dvoutaktní motor > dvoutakt). The newly formed words are prevailingly 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 back-formation.

PART II: ANALYSIS OF THE MATERIAL AND RESULTS

Introduction

The objective of the present work is to describe the development of the process of backformation in the 20th and the early 21st century and draw the relevant conclusions about the main tendencies at present and expectations for the future. The situation in the first half of the 20th century was described and analyzed by Esko V. Pennanen in his Contributions to the Study of Back-Formation in English (1966). The author identified and defined the productive types of back-formation and, as a result of his analysis, he established a typology, which is a clear system of six types according to the part of speech of the source word and the resulting word. The author focused his attention on the whole history of this phenomenon, starting in the 13th century and following the development until the early 1960s. Several other linguists have dealt with back-formation since the middle of the 20th century (see Chapter 2), but always within a larger work focused on morphological process in general and describing back-formation as one of the minor ones. Biermeier (2008) mentions Pennanen's classic study as the main authority in the field of back-formation and the only comprehensive study on this topic so far. Since the process of back-formation still continues producing new items of vocabulary at present, it must be seen as productive and so deserving larger 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 back-formations in the first half of the 20th 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 20th 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 back-formations which might be recorded in the future.

In order to give a comprehensive description and analysis of back-formation in the 20th and the early 21st century, we have included in our investigation three samples of material (see Appendices V-VII):

- Pennanen's original sample of 225 back-formations from the first half of the 20th century
- A new sample of **246** back-formations from the first half of the 20th century
- A new sample of 229 back-formations from the second half of the 20th and the beginning of the 21st century

The whole material containing Pennannen's collection and the new samples included in the description and analysis of dictionary-confirmed back-formations in the present work amounts to **700** items.

The source of the first sample was Pennanen's monograph *Contributions to the Study of Back-Formation in English* (1966). Pennanen used several sources, namely dictionaries (both general standard and dialectal), newspapers and magazines (see Chapter 3). 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 our own samples of back-formations are concerned, we focused our 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 9th). Concise Oxford Dictionary 11th Edition (COD 11th), 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 11th CD). Merriam Webster's Unabridged Dictionary (MW'sUD). Oxford English Dictionary, 2nd 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 2). 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. The typology consists of six types¹⁴, of which

¹⁴ for the detailed description of all the types see Chapter 4

some are extremely productive at present (especially Type II), while others are very small and seem to be disappearing (especially Type V).

The author does not include in his sample two other types of words which are commonly described as back-formations in the literature: prefix back-formations (e.g. dentulous < edentulous, ept < inept) and inflectional back-formations (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 back-formations 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 VII and Type VIII, namely for the following reasons: As far as prefix back-formations 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 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 back-formations are included in the new classification, since they are seen as the results of a similar analogy as the "traditional" back-formations: 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 of the second half of the 20th 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 backformation, which could continue developing in the future. Since this category deserves attention, we have integrated this group of back-formations in our system as type IX. The newly collected sample of the 20th century back-formations 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: adjective from noun

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

■ Type VII: prefix back-formations

• Type VIII: inflectional back-formations

■ Type IX: adjective from agent noun

The method of collecting of the relevant words combined diachronic and synchronic approach. It 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 back-formations 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 back-formation while other meanings were not, e.g. quantitate: MW's 11th CD (1927) "to measure or estimate the quantity of; especially to measure or determine precisely; to express in quantitative terms", backformation; however OED4 (1960), Medicine: "to ascertain the quantity or extent of", derivation. Other polysemous words produced back-formations of individual meanings in different time periods (e.g. escalate¹, 1922; escalate², 1944, see Appendix I, 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 work, each back-formation 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 the 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 11th 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 we indicate the gradual development in quantity over the given period (in the individual decades), which is illustrated in a graph. 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 back-formations (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 VII) subtracted from the source words are evaluated from the point of view of their frequency in the given sample. The gathered items are furthermore classified 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 our 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 described, pointing to some interesting, surprising or unusual properties and circumstances which deserve attention. Eventually, each sample is analysed, commented on and the summarizing conclusions are made.

The following chapter presents a detailed description and analysis of the newly gathered sample of back-formations from the first half of the 20th century. This sample is intended to complete Pennanen's sample analyzed in his study (1966). Since Type IX was discovered only for the second half of the 20th century, the description and analysis for the first half does not include this type; it will be presented and integrated in the system in the analysis of the following period.

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 backformation in the period of 1900-1960 is provided.

5. BACK-FORMATION IN THE FIRST HALF OF THE 20TH CENTURY

5.1 Description and analysis of back-formations 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.-VIII. No item has been found for Type IX in the first half of the 20^{th} century.

5.1.1 TYPE I: verb from agent / instrument noun (37 items)

For the complete description of the material see Appendix I.

5.1.1.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910: adolesce, curate, double-head, knuckle-dust, muck-rake

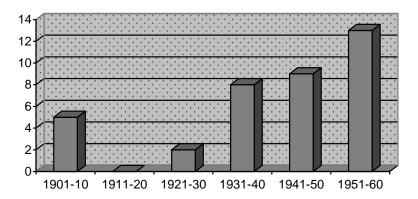
1911 – 1920:

1921 – 1930: escalate¹, side-wind

1931 – 1940: micronize, penny-pinch, redbait, rototill, squeg, switch-hit, zip, talent-spot

1941 – 1950: bartend, bird-watch, cliff-hang, doze, second-guess, sedate, skyscrape, spelunk, transduce¹

1951 – 1960: bus, co-drive, compand, copyedit, escalate², free-load, overachieve, pinhook, razor- slash, rotavate (rotovate), transduce², underachieve, varitype



Graph 1: Quantitative distribution of Type I in individual decades of the whole period of 1901-1960

Type I has a rising trend, with the most fruitful period being the 1950s.

5.1.1.2 Classification according to the meaning of the source word

AGENT (person)	INSTRUMENT (inanimate)
adolescent	cliff-hanger
bartender	compander
bird-watcher	dozer
busboy	double-header
co-driver	escalator ¹
copyeditor	escalator ²
curator	knuckle-duster
free-loader	Micronizer
muck-raker	Rotavator
overachiever	rototiller
penny-pincher	sedative
pinhooker	skyscraper
razor-slasher	squegger
redbaiter	transducer ¹
second-guesser	transducer ²
sidewinder	VariTyper
spelunker	zipper
switch-hitter	
talent-spotter	
underachiever	
20	17

Table 1: Classification of Type I according to the meaning of the source word, the period of 1901-1960

As far as the meaning of the source words is concerned, names of persons slightly prevail over the items referring to animate and to inanimate entities.

5.1.1.3 Classification according to the complexity of back-formations

Composita	(no neoclassical)	17
Simplicia	(including 5 monomorphemic)	20
Total		37

Table 2: Classification of Type I according to the complexity of back-formations of the period of 1901-1960

The term "simplicia" refers to the items which have only one root. This subcategory 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*.

The higher number of simplex items is slightly surprising as the expectation before the analysis presupposed a much higher number of compounds.

5.1.1.4 Classification according to the suffix of the source word

Suffix	-er	-or	other: -ive, -ent, -boy
Total	29	5	3

Table 3: Classification of Type I according to the suffix of the source word in the period of 1901-1960

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

5.1.1.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 1.)

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 (15) 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 – 15 out of 34. Examples are: *bird-watch*, *copyedit*, and *zip*. There are a few slang words (e.g. *knuckle-dust*), but such a number (5 out of 34) is not very significant.

5.1.1.6 Specific features

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: *adolesce*, *redbait* and *spelunk*.

In pairs "verb < agent noun", from 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.: *adolesce* – "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 (skyscraper = "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.

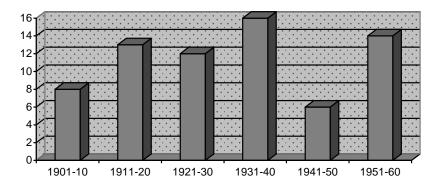
Overachieve and underachieve are interesting items in that they are antonymous terms in psychology both recorded in the 1950s.

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

5.1.2 TYPE II: verb from action noun (79 items)

For the complete description of the material see Appendix I.

- 5.1.2.1 Classification according to the date of first occurrence (development over the period)
- 1901 1910: brute, decompensate, ice-fish, notate, planograph, sorb, subincise, thrombose
- 1911 1920: abreact, auto-suggest, dedifferentiate, ecphore, excyst, exflagellate, gelate, lenite, perseverate, phagocytose, politick, surveil, transvaluate
- 1921 1930: acculturate, decarboxylate, desorb, inscript, introject, keeper, racialize, repercuss, revalorize, revaluate, steam-distill, upkeep
- 1931 1940: appersonate, carboxylate, chemisorb, defibrillate, demodulate, derivatize, hyperventilate, Indian-wrestle, metalate, parcellate, pyrolize, reflate, show-jump, spermatize, subassemble, telecommunicate
- 1941 1950: choreograph, co-vary, exsolve, fellate, fluoridate, fragmentate, infantilize, intercool, job-hunt, loud-hail, mirate, polygonize, scapegoat, seriate, subvocalize, teleport
- 1951 1960: advect, blockbust, chromatograph, convect, destruct, interconvert, introgress, mutarotate, pend, pinocytose, practice-teach, superinfect, superovulate, symbiose



Graph 2: Quantitative distribution of Type II in individual decades of the whole period of 1901-1960

Although the last but one decade shows a falling trend, generally it is possible to say that, within the whole period, type II is growing in number.

5.1.2.2 Classification according to the meaning of the source word

	action /process	product /result /state
Total	76	3

Table 4: Classification of Type II according to the meaning of the source word in the period of 1901-1960

An overwhelming majority of the source words clearly refer to the action or process, by which something is done. 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).

5.1.2.3 Classification according to the complexity of back-formations

Composita	(including 13 neoclassical)	24
Simplicia	(including 7 monomorphemic)	55
Total		79

Table 5: Classification of Type II according to the complexity of back-formations in the period of 1901-1960

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 *Indianwrestle* 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.

5.1.2.4 Classification according to the suffix of the source word

Suffix	-ion / -ation	-ing	-is	-у	other: -ia, -io, -ance
Total	53	14	5	4	3

Table 6: Classification of Type II according to the suffix of the source word in the period of 1901-1960

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).

5.1.2.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 2.)

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.

5.1.2.6 Specific features

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 back-formation – from the morphologically more complex noun towards the verb.

Other verbs are defined by means of 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".

5.1.3 TYPE III: verb from adjective (21 items)

For the complete description of the material see Appendix I.

5.1.3.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910: stupend

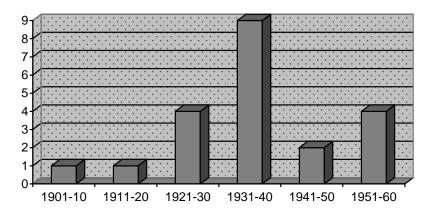
1911 – 1920: french fry

1921 – 1930: cathet, quantitate, stuff, unweight

1931 – 1940: bonderize, cairn, disproportionate, fetishize, floss, nodulate¹, rort, scrag, sozzle

1941 – 1950: gangle, zonk

1951 – 1960: computerize, decongest, nodulate², norm



Graph 3: Quantitative distribution of Type III in individual decades of the whole period of 1901-1960

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

5.1.3.2 Classification according to the meaning of the source word

result	feature /	relation to	relating to
	quality	a state	an action
12	5	2	2

Table 7: Classification of Type III according to the meaning of the source word in the period of 1901-1960

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.

5.1.3.3 Classification according to the complexity of back-formations

Composita	1
Simplicia	(including 11 monomorphemic) 20
Total	21

Table 8: Classification of Type III according to the complexity of back-formations in the period of 1901-1960

The fact that there is only one compound verb (*french fry*) in this type is fairly surprising. On the other hand, 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*.

5.1.3.4 Classification according to the suffix of the source word

-ed	-у	other: -ic, ous, -ive, -ing, -ant
12	4	5

Table 9: Classification of Type III according to the suffix of the source word in the period of 1901-1960

The presence of certain suffixes is more or less in agreement with their semantic content: -ed typically for the result, -y typically for the quality.

5.1.3.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 3.)

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.

5.1.3.6 Specific features

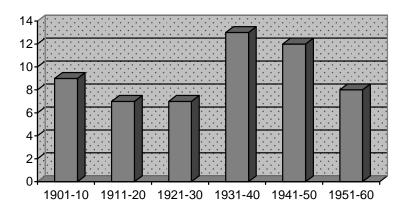
The source adjective *flossy* has a fairly high number of meanings; the derived verb is based on that one which is figurative: "saucy, impertinent, fresh, fancy, showy" > "to flirt, to show off".

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 back-formation, but the result of derivation from *quantity* (n.). *Stupend* is in OED4 introduced as G.B. Shaw's word.

5.1.4 TYPE IV: noun from adjective (56 items)

For the complete description of the material see Appendix I.

- 5.1.4.1 Classification according to the date of first occurrence (development over the period)
- 1901 1910: apochromat, dichromat, frivol, interfluve, intersex, meroplankton, paramagnet, polychromasia, ultramicroscop
- 1911 1920: crystalloblast, cryptozoa, epistasis, hypostasis, mesotroph, osmophore, trivia
- 1921 1930: bicone, metatroph, polytrope, priss, slant-eye, sternutator, trichromat
- 1931 1940: apomict, archosaur, biface, dip, lair, orbicule, pluton, Rhaeto-Roman, rort, sardony, smarm, syntone, wack
- 1941 1950: adiabat, allochthon, bizone, dill, eustatsy, ferromagnet, gnotobiote, homæostat, parafovea, polygene, polyunsaturate, prototroph
- 1951 1960: clast, didact, exurb, funk, lysogen, narcolept, sleaze, spasmogen



Graph 4: Quantitative distribution of Type IV in individual decades of the whole period of 1901-1960

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.

5.1.4.2 Classification according to the meaning of the source word and the resulting word Source word - adjective

feature / quality	related to a	related to habit /	belonging to a	related to a place /
	previous action	state	class	position
22	5	10	15	4

Table 10: Classification of Type IV according to the meaning of the source word in the period of 1901-1960

There are at least five identifiable classes of meaning of the source adjectives, as indicated in the chart. 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.

Resulting word – noun

person	thing /abstract entity	plant	animal /organism	place	process
13	26	1	7	4	5

Table 11: Classification of Type IV according to the meaning of the resulting word in the period of 1901-1960

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*.

5.1.4.3 Classification according to the complexity of back-formations

Composita	(including 19 neoclassical)	23
Simplicia	(including 15 monomorphemic)	33
Total		56

Table 12: Classification of Type IV according to the complexity of back-formations in the period of 1901-1960

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.

5.1.4.4 Classification according to the suffix of the source word

-ic	-у	-al / -ical /-ial / -ual	-ous	ed	other: -an, -ian, -ar, -ce, -is
31	10	6	2	2	5

Table 13: Classification of Type IV according to the suffix of the source word in the period of 1901-1960

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.

5.1.4.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 4.)

The nouns back-formed from adjectives are typically technical terms of various fields, especially natural sciences. Such coloured words form 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*).

5.1.4.6 Specific features

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 back-formations 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).

As it follows from the classification above, 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 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 back-formation, 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 (bahuvrîhi) compound referring to "a person with slanting eyes, specifically an Asian", usually taken to be offensive and having the U.S. slang connotation.

5.1.5 TYPE V: adjective from noun (17 items)

For the complete description of the material see Appendix I.

5.1.5.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910: biometric, hypoparathyroid,

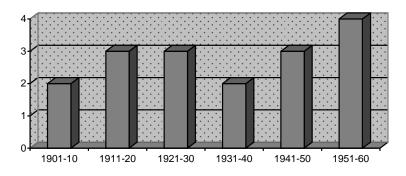
1911 – 1920: aerobatic, superconductive, hyperthyroid

1921 – 1930: argentaffin, co-ordinate, dermatoglyphic

1931 – 1940: logistic, surreal

1941 – 1950: avionic, paratroop, premune

1951 – 1960: autoimmune, cloze, cybernetic, vacuolating



Graph 5: Quantitative distribution of Type V in individual decades of the whole period of 1901-1960

The distribution of back-formations of this type over the period is fairly well-balanced, slightly growing; for each decade, two to four items have been found.

5.1.5.2 Classification according to the meaning of the source word

person	thing/abstract entity	state	activity / process
1	4	4	8

Table 14: Classification of Type V according to the meaning of the source word in the period of 1901-1960

The resulting adjectives in this group are related to four types of noun-meanings, of which the meaning "activity / process", with its 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*.

5.1.5.3 Classification according to the complexity of back-formations

Composita	(including 6 neoclassical) 8	,
Simplicia	(including 1 monomorphemic) 9)
Total	17	,

Table 15: Classification of Type V according to the complexity of back-formations in the period of 1901-1960

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*.

5.1.5.4 Classification according to the suffix of the source word

-S	-ity	-ization/-ion	-ure	-ism
7	2	4	1	3

Table 16: Classification of Type V according to the suffix of the source word in the period of 1901-1960

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.

5.1.5.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 5.)

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 type would practically include only technical terms.

5.1.5.6 Specific features

This class is fairly small and 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 back-formation 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.

5.1.6 TYPE VI: noun from another noun which is believed to be its derivative (24 items)

For the complete description of the material see Appendix I.

5.1.6.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910: deuteranope, protanope, tautomer

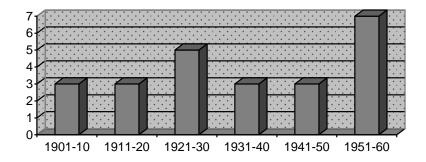
1911 – 1920: claustrophobe, cryoscope, leg-pull

1921 – 1930: aerobat, plasmal, schizophrene, taxon, vulcanizate

1931 – 1940: polymerizate, schizothyme, strip-tease

1941 – 1950: bloop, morph, pseudoallele

1951 – 1960: agoraphobe, grievant, kine, mythomane, radiochemist, retardate, scintiscan



Graph 6: Quantitative distribution of Type VI in individual decades of the whole period of 1901-1960

The most fruitful period within this type is the fifties, after a certain decrease in the previous twenty years.

5.1.6.2 Classification according to the meaning of the source word and the resulting word Source word - noun

state of mind / disease	activity / process	abstract entity	class	person	instrument
9	9	2	2	1	1

Table 17: Classification of Type VI according to the meaning of the source word in the period of 1901-1960

The meaning "state of mind / disease" seems to be the typical basis of back-formation 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.

Resulting word – noun

person	thing/abstract entity	result of an activity / process	action	instrument
11	6	5	1	1

Table 18: Classification of Type VI according to the meaning of the resulting word in the period of 1901-1960

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.

5.1.6.3 Classification according to the complexity of back-formations

Composita	(including 12 neoclassical)	16
Simplicia	(including 4 monomorphemic)	8
Total		24

Table 19: Classification of Type VI according to the complexity of back-formations in the period of 1901-1960

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*.

5.1.6.4 Classification according to the suffix of the source word

- ia	-y /-omy	-ion	-er	-ism	-ics	others: -ce, -ing, -eme, -ogen
7	3	3	3	2	2	4

Table 20: Classification of Type VI according to the suffix of the source word in the period of 1901-1960

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 (stripteaser).

5.1.6.5 Classification according to the stylistic and regional connotation

(See Appendix II, Table 6.)

This 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*.

5.1.6.6 Specific features

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 back-formation 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 back-formation, 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*.

5.1.7 Type VII: prefix back-formations (8 items)

For the complete description of the material see Appendix I.

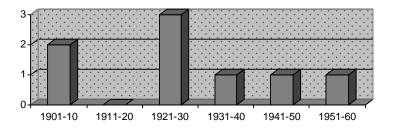
5.1.7.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910: sorb, sorption

1911 – 1920:

1921 – 1930: dentulous, gruntle, lapsarian

1931 – 1940: ept 1941 – 1950: clitic 1951 – 1960: opsin



Graph 7: Quantitative distribution of Type VII in individual decades of the whole period of 1901-1960

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

5.1.7.2 Classification according to the semantic relation between the source and the resulting word

hyponymy	antonymy	meronymy
4	3	1

Table 21: Classification of Type VII according to the semantic relation between the source and the resulting word in the period of 1901-1960

The relations are distributed almost equally, the fairly high number of hyponymic pairs is a little surprising, since it is antonymy that was expected to be the prevailing relation.

Meronymy is represented by *opsin* defined as "a protein liberated from *rhodopsin* by the action of light" (OED4)

5.1.7.3 Classification according to the part of speech of the resulting word

noun	adjective	verb
4	2	2

Table 22: Classification of Type VII according to the part of speech of the resulting word in the period of 1901-1960

This class, unlike those where a suffix is involved, contains various parts of speech: nouns are typically prevailing, but there are also adjectives and verbs.

5.1.7.4 Classification according to the complexity of back-formations

Composita		0
Simplicia	(including 3 monomorphemic)	8
Total		8

Table 23: Classification of Type VII according to the complexity of back-formations in the period of 1901-1960

The group contains no compound words, and of the rest, three are monomorphemic: *ept*, *gruntle and sorb*.

5.1.7.5 Classification according to the prefix of the source word

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 co-hyponyms (e.g. ad-/ab-, en-/pro-) and one referring to a holonym (rhodo- in rhodopsin).

5.1.7.6 Classification according to the stylistic and regional connotation

(See Appendix II, Table 7)

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*.

5.1.8 Type VIII: inflectional back-formations (4 items)

For the complete description of the material see Appendix I.

5.1.8.1 Classification according to the date of first occurrence (development over the period)

1901 – 1910:

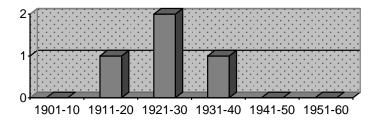
1911 - 1920: sciapod

1921 – 1930: gladiola, kudo

1931 - 1940: bicep

1941 – 1950:

1951 - 1960:



Graph 8: Quantitative distribution of Type VIII in individual decades of the whole period of 1901-1960

This category is generally very small, altogether there are only four items found for the first half of the 20^{th} century, having no representatives in the first decade and in the forties and fifties.

5.1.8.2 Classification according to the complexity of back-formations

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.

5.1.8.3 Classification according to genuineness of the grammatical suffix

actual plural	supposed plural
2	2

Table 24: Classification of Type VIII according to genuineness of the grammatical suffix in the period of 1901-1960

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.

5.1.8.4 Classification according to the stylistic and regional connotation

(See Appendix II, Table 8)

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."

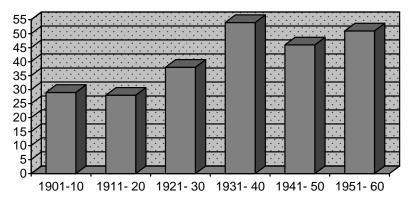
5.2 Summarizing analysis of the period of 1901-1960 – words collected in the present research – the new sample

For the first half of the 20th century (1901 – 1960), the total number of back-formed words found within our 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 back-formation for the first half of the 20th century.

5.2.1 Quantitative development of back-formation over the whole period (new sample)

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

Table 25: Number of items in individual decades and the total number of all items in the period of 1901-1960 (new sample)

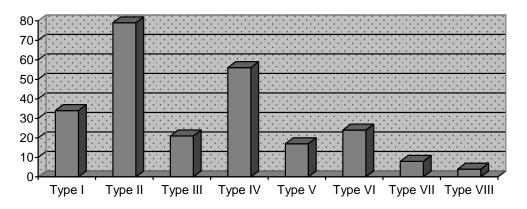


Graph 9: Development of the process of back-formation over the period of 1901-1960 – numbers of back- formations of all types found in individual decades (new sample)

There have been found much 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 back-formations in the following twenty years does not decrease significantly.

5.2.2 Representation of individual types over the whole period (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 (prefix back-formations), Type VIII (inflectional back-formations) and Type IX (adjective from agent noun) are not included in Pennanen's classification at all, so their numbers will not increase after the integration of both samples.

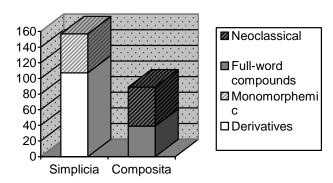


Graph 10: Representation of individual types over the whole period of 1901-1960 (new sample)

5.2.3 Morphological structure of back-formations over the whole period (new sample)

	full-word	neoclassical	derivatives	monomorphemic
	compounds	compounds		words
Type I	17	0	15	5
Type II	11	13	48	7
Type III	1	0	9	11
Type IV	4	19	18	15
Type V	2	6	8	1
Type VI	4	12	4	4
Type VII	0	0	5	3
Type VIII	0	0	0	4
Total	39 / 16 %	50 / 20 %	107 / 44 %	50 / 20 %
	89 / 36 %		157 / 64 %	

Table 26: Morphological structure of the back-formed words over the whole period of 1901-1960 (new sample)



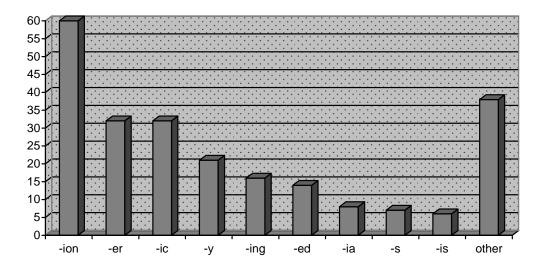
Graph 11: Shares of individual morphological structures over the whole period of 1901-1960 (new sample)

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 %).

5.2.4 Representation of individual suffixes subtracted over the whole period (new sample)

-ion	-er	-ic	-у	-ing	-ed	-ia	-S	-is	other
60	32	32	21	16	14	8	7	6	38

Table 27: Representation of individual suffixes subtracted over the whole period of 1901-1960 (new sample)



Graph 11: Representation of individual suffixes subtracted over the whole period of 1901-1960 (new sample)

The most frequent suffix subtracted in the additional material of the first half of the 20th 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 noun) and in a small number in Type VI (abstract noun); the domain of -ic is Type IV (adjectives).

Suffix -y is typical of nouns of Type IV, it partly occurs in Types II (action noun) and III (qualitative adjective).

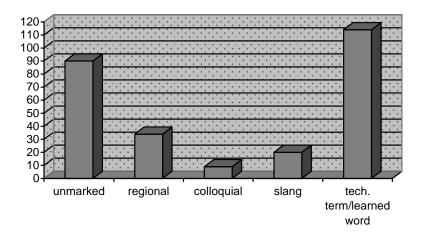
Suffixes -*ing* and -*ed* are involved in the process almost equally, the former occurring in Type II (action noun), the latter mainly in adjectives of Type III and marginally of Type IV. Suffixes -*is*, -*s* and -*ia* appear in a lower number of source nouns, they are typically subtracted from nouns 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.

5.2.5 Stylistic and regional markedness of back-formations over the whole period (new sample)

	unmarked	regional	colloquial	slang	technical term /	Total
					learned word	
Type I	15	15	2	5	7	44
Type II	31	7	2	0	40	80
Type III	7	4	0	7	7	25
Type IV	13	7	3	7	33	63
Type V	8	0	0	0	9	17
Type VI	10	1	1	0	13	25
Type VII	3	0	0	0	5	8
Type VIII	3	0	1	1	0	5
Total	90	34	9	20	114	267
Percentage:	37 %	14 %	4 %	8 %	46 %	

Table 28: Stylistic and regional markedness of back-formations over the whole period of 1901-1960 (new sample)



Graph 12: Portions of unmarked and stylistically and regionally coloured words in the material 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 back-formations.

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.

Some words in our research are sometimes coloured in more than one way (e.g. Americanism and slang); as a result the individual percentage values in the chart do not make up 100% since some connotations overlap.

5.3 The overall picture of the first half of the 20th 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 19th and the 20th century, back-formation had become an important process of word-formation. The sudden increase in the number of back-formations 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, we have found, described and analysed another 246 for the period of 1901-1960, the last stage of his investigation. As a result, 471 back-formations have been found for the given period, which is an enormous quantity in comparison with any of the previous ones.

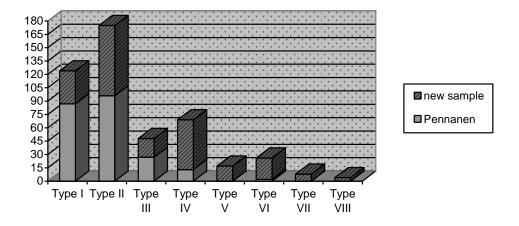
In this connection, it is necessary to call attention to the fact that there is a certain difference between Pennanen's and our approach to the question of what should be involved in the analysis. As far as the 20th century is concerned, Pennanen essentially deals only with the first four categories, 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, marginal word-formation processes: he has no item of Type V and only two items of type VI (1%) for the 20th century in his material. Our research of the additional material from the first half of the 20th 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 VII and Type VIII.

It is useful to compare the results of Pennanen's and the present analysis:

	Pennanen	Additional sample of	Total
		the present research	
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	0	17 7 %	17 4 %
Type VI	2 1%	24 10 %	26 5 %
Type VII	0	8 3 %	8 2 %
Type VIII	0	4 2 %	4 1 %
Total	225	246	471

Table 29: 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 13: 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 our 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 some items of Type V and a decent number of items of Type VI in the present research, although these two categories still remain the smallest, even after the addition.

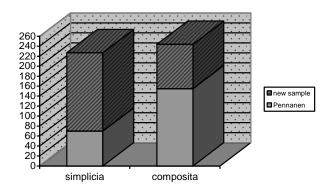
The overall results regarding the period of 1901-1960, eventually have slightly changed the picture at which Pennanen arrived: after the final addition of both analyses it is clear that the strongest three types from the first half of the 20th century are **Type II** (verbs from action nouns), **Type 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 bee seen in the time-distance in which the additional research of the period in question was done. Language is a continuous development – over the following fifty-year period after Pennanen's analysis many new back-formations have been introduced in the dictionaries and some processes that had started then or earlier have been completed. Comparing the situation in the 20th 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 back-formations 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 30: Numeral and percentage comparison and addition of compound and simplex items in Pennanen's and the new sample, regarding the period of 1901-1960



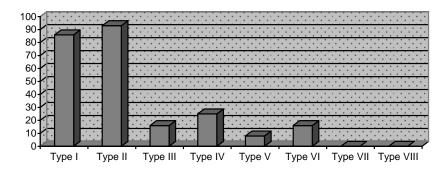
Graph 14: Representation of composita and simplicia in Pennanen's and the new sample, regarding the period of 1901-1960

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 form 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 com	pounds
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	8	8	3 %
Type VI	0	16	16	7 %
Type VII	0	0	0	
Type VIII	0	0	0	
Total	155	89	244	

Table 31: Percentage share of individual types in the number of compounds in the period of 1901-1960



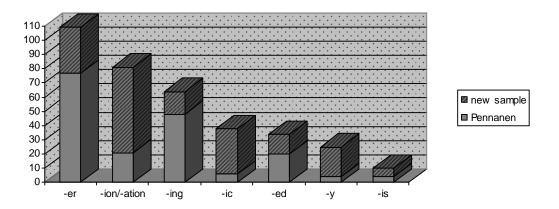
Graph 15: Percentage share of individual types in the overall number of compounds in the period of 1901-1960

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 back-formation of the first half of the 20th 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 back-formation, 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	-у	-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 32: Survey of the most frequent suffixes involved in back-formation in the period of 1901-1960



Graph 16: Representation of the most frequent suffixes in Pennanen'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 Pennanen'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 Pennanen'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 back-formation, Pennanen 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 20th century: *ank*, *auth*, *bludge*, *chauffe*, *gramp*, *lech*, *mart*, *schlent*, *spinst*, *tute*, *verge*, *vive* (TypeI); *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 back-formations 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 much fewer slang or colloquial words. As already mentioned earlier in this work, the extremely high share of technical terms in our material and the low number of substandard 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^{th} century.

Another interesting finding of Pennanen's collection is the fact that some back-formations appeared for the first time in fiction and he introduces some authors in whose works back-formations were first instanced, among others those of the 20th 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 our research, we have found another of G.B. Shaw's back-formations: stupend v. < stupendous adj., "to amaze, dumbfound" (OED4).

As far as regional connotation is concerned, Pennanen states that the great majority of recent back-formations 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 back-formations in the new sample form 14%, being mostly of American origin or use.

5.4 Conclusion

Based on our study of Pennanen's material together with the new collection, description and analysis of relevant words, we have come to the conclusion that the first half of the 20th century can be considered as the most active, most dynamic and productive period in the development of the process of back-formation in its whole history. To Penannen's material consisting of 225 back-formations, another 234 back-formations 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 back-formation in the first half of the 20th 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 back-formation takes an important part in forming verbs in English (together with conversion and affixation).**

Words formed by back-formation occur in a variety of fields of life and many of them are stylistically coloured, with the connotation ranking from substandard (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, we also included prefix and inflectional back-formations, indicated as Type VII and Type VIII, respectively. Eight items have been identified for Type VII and four for Type VIII. **Prefix back-formations 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 back-formations in our sample result from subtraction of either actual or wrongly interpreted plural suffix**. They are monomorphemic and stylistically neutral.

After the addition of these 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**. Language is an open, constantly developing process, therefore we do not rule out a possibility that some following research might identify other relevant items and furthermore increase the present number.

6. BACK-FORMATION IN THE SECOND HALF OF THE 20^{TH} CENTURY

6.1 Description and analysis of back-formations of the second half of the 20th and the beginning of the 21st century (a new sample of 229 items)

Pennanen in his study (1966) investigated the rise and history of back-formation in English from the 13th century until the early 1960s of the 20th century and as a result, he made several general conclusions about the nature of this word-formation process. In the present research, we focus only on the 20th and the beginning of the 21st century, in order to bring comprehensive information about the development of the phenomenon at present. First, we collected a new sample of 246 items formed in the first half of the 20th century, we integrated it with that of Pennanen's (225 items) and, based on Pennanen's analysis and our additional findings, we made several conclusions about the situation in that period (see Chapters 5 and 7).

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, we 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 21st 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 back-formations attested in dictionaries for the second half of the 20th and the beginning of the 21st century. It is based on the sample of **229** back-formations excerpted from the same set of dictionaries as that used for the previous period (see Introduction of Part II) and from monographs by contemporary authors. In our categorization of the material collected, we continue applying Pennanen's typology (Types I - VI), which we have extended by three other Types (VII - IX).

The first half of the 20th 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 back-formations over the present five decades (from the1960s to first decade of the 21st century) is concerned, we 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.

6.1.1 TYPE I: verb from agent / instrument noun (31 items)

For the complete description of the material see Appendix III.

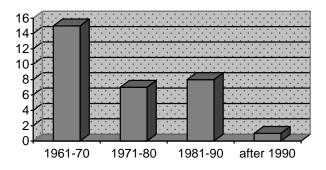
6.1.1.1 Classification according to the date of first occurrence (development over the period)

1961 - 1970: ass-lick, blow-dry, buff, daysail, helicopt, hot-dog, lase, mase, mind-blow, overachieve, shake-dance, strike-break, supply-teach, trend-set, windsurf

1971 - 1980: front-load, train-spot, incent, lime, play-make, roller-coast, teleprint

1981 - 1990: comede, deal, jackroll, skirt-chase, topline, turbocharge, vocode, volumize

After 1990: Tase



Graph 17: Quantitative distribution of Type I in individual decades of the whole period after 1961

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

6.1.1.2 Classification according to the meaning of the source word

AGENT (person)	INSTRUMENT (inanimate)
ass-licker	blow-dryer
comedian	buffer
dealer	day sailer
hot-dogger	front-loader
jackroller	helicopter
limer	incentive
overachiever	laser
play-maker	maser
shake-dancer	mind-blower
skirt-chaser	roller-coaster
srike-breaker	Taser

supply-teacher	teleprinter
topliner	turbocharger
train-spotter	vocoder
trend-setter	volumizer
	Windsurfer
15	16

Table 33: Classification of Type I according to the meaning of the source word in the period after 1961

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* 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).

6.1.1.3 Classification according to the complexity of back-formations

Composita	(2 neoclassical) 19
Simplicia	(including 10 monomorphemic) 12
Total	31

Table 34: Classification of Type I according to the complexity of back-formations in the period after 1961

In this category compounds clearly prevail. Among simplex words, there are an unusually large number of monomorphemic words (ten), e.g.: *buff*, *deal*, *lase*, *mase*.

6.1.1.4 Classification according to the suffix of the source word

-er	other: -ian, -ive
29	2

Table 35: Classification of Type I according to the suffix of the source word in the period after 1961

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.

6.1.1.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 1.)

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.

6.1.1.6 Specific features

The type is characterized by a large number of compounds consisting of originally independent morphemes (*front-load*, *roller-coast*, *shake-dance*, and others).

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 back-formation processes here.

6.1.2 TYPE II: verb from action noun (126 items)

For the complete description of the material see Appendix III.

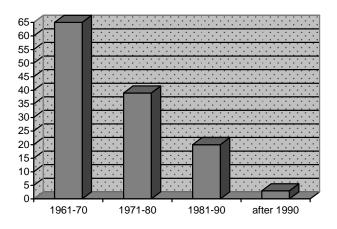
6.1.2.1 Classification according to the date of first occurrence (development over the period)

1961 – 1970: access, alluviate, back-talk, batch-process, bibliograph, blast-freeze, concord, contracept, cross-dress, cybernate, decondense decriminalize, derecognize, deregulate, direct-dial, downwell, electrophorese, evapotranspire, extrapose, feather-bed, fine-tune, frequency-modulate, grit-blast, hand-hold, holograph, hydroborate, immunosuppress, intergroup, jaw-bone, kite-fly, loco-spot, metallide, methanate, mode-lock, nitpick, one-up, paddock-graze, photoduplicate, physisorb, planate, plea-bargain, pole, rack-job, reconfigure, redefect, remediate, respirate, safekeep, self-destruct, sericitize, skateboard, sonolyse, soul-search, spear-fish, speciate, vinify, switch-sell, tectonize, telephone-tap, teletransport, touch-type, tumesce, upvalue, wedel

1971 – 1980: ass-kiss, adenylate, biomagnify, deconstruct, demerge, desinform, drownproof, enculturate, endocytose, eutrophicate, event, exfiltrate, exocytose, finlandize, gentrify, interline, kerb-crawl, layback, mediocritize, metricate, microinject, micromanage, micropropagate, micropublish, one-hand, panic-buy, pot-train, predate, proact, queue-jump, red-cook, role-take, shadow-cast, sulphonylate, surf-cast, swiden, tail-walk, touch-dance, trickle-irrigate

1981 – 1990: accreditate, age-date, back-calculate, break-dance, divizionalize, finger-pick, fly-tip, forthold, gay-bash, grice, hydrofracture, job-share, microcode, ovate, rate-cap, snowboard, telemarket, valet-park, word-process, yuppify

After 1990: carjack, computer-generate, drop-ship



Graph 18: Quantitative distribution of Type II in individual decades of the whole period after 1961

This traditionally numerous type is represented by the highest number of items found in the sixties (65) and also a fairly large number in the following period (39). The process still continues, which is evidenced in the occurrence of a fairly decent number of more recent items in the 1980s (20) and also three words in the 1990s.

6.1.2.2 Classification according to the meaning of the source word

action /process	product /result /state
121	5

Table 36: Classification of Type II according to the meaning of the source word in the period after 1961

Typically, the verbs formed within this type are generally definable as "to do the action denoted by the action noun", e.g. *enculturate* "to modify or condition by enculturation", or *gentrify* "to attempt or accomplish the gentrification of "; in other words, almost all the source nouns refer to the action. The only five slightly different ones are *bibliography*, *concordance*, *one-handness*, *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-handness* is special in that the source word refers to a state: "the state of being one-handed", however, as a result the process of back-formation 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."

6.1.2.3 Classification according to the complexity of back-formations:

Composita	(incl. 22 neoclassical)	80
Simplicia	(incl. 8 monomorphemic words)	46
Total		126

Table 37: Classification of Type II according to the complexity of back-formations in the period after 1961

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*, *divizionalize*). 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*.

6.1.2.4 Classification according to the suffix of the source word

-ing	-ion / -ation	-is	-ment	-ance /-ence	others: -y,-manship, -n,
					-er, -ness
61	51	4	2	2	2 + 1 + 1 + 1 + 1

Table 38: Classification of Type II according to the suffix of the source word in the period after 1961

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.

6.1.2.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 2.)

Similarly as with the material of the first half of the 20th century, there are many words which are presented in dictionaries as unmarked. However, it is necessary to add that some of

them are fairly limited in use to a specific field of human activities. Thus *concord*, for example, is used in the given meaning in the practice of writing books, *cybernate*, is used in the area of manufacturing, *divizionalize* 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.

6.1.2.6 Specific features

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 *tumesce* is described in OED4 as a result of noun *tumescence*, while in some other dictionaries (e.g. Random House Dictionary) the adjective *tumescent* 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 we 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 back-formations 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 beck-formations. 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 back-formations 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-19th 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 back-formation 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): *jobsharing* (1972) – *job-share* (1982), *proaction* (1986) > *proact* (1986), *car-jacking* (1991) > *carjack* (1991).

6.1.3 TYPE III: verb from adjective (17 items)

For the complete description of the material see Appendix III.

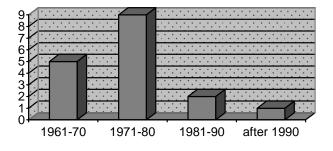
6.1.3.1 Classification according to the date of first occurrence (development over the period)

1961 - 1970: phase-modulate, red-shift, self-finance, steel-face, superconduct

1971 - 1980: anonymize, auto-destruct, biodegrade, Dolby, gobsmack, ripsnort, silicone, silver-point, tenure

1981 - 1990: hard-wire, skeeve¹

After 1990: skeeve² (additional meaning)



Graph 19: Quantitative distribution of Type III in individual decades of the whole period after 1961

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 back-formation, 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 20th 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.

6.1.3.2 Classification according to the meaning of the source word

result	feature / quality	relation to an ability	relation to an action
9	4	2	2

Table 39: Classification of Type III according to the meaning of the source word in the period after 1961

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.

6.1.3.3 Classification according to the complexity of back-formations

Composita	(including 2 neoclassical)	10
Simplicia	(5 monomorphemic)	7
Total		17

Table 40: Classification of Type III according to the complexity of back-formations in the period after 1961

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.

6.1.3.4 Classification according to the suffix of the source word

-ed	-ing	- y,	-able	-ive
10	3	2	1	1

Table 41: Classification of Type III according to the suffix of the source word in the period after 1961

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.

6.1.3.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 3.)

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.

6.1.3.6 Specific features

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 back-formation 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 back-formation 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

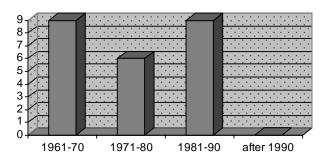
the other ("to loathe a person or thing; to dislike intensely") was recorded later – at the beginning of the nineties.

6.1.4 TYPE IV: noun from adjective (24 items)

For the complete description of the material see Appendix III.

- 6.1.4.1 Classification according to the date of first occurrence (development over the period)
- 1961 1970: grunge, paramedic, pretectum, psychedelia, raunch, scuzz, somatotroph, strop, tight-ass
- 1971 1980: alexithymia, anaphor, glitz, gork, methanogen, piscivore
- 1981 1990: ditz, flash, shonk, skeeve, supramolecule, synesthete, tack, transgene, un-hero

After 1990:



Graph 20: Quantitative distribution of Type IV in individual decades of the whole period after 1961

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.

6.1.4.2 Classification according to the meaning of the source word and the resulting word Source word - adjective

feature / quality	belonging to a	related to habit /	related to the	related to a
	class	state /activity	previous action	place
15	3	3	2	1

Table 42: Classification of Type IV according to the meaning of the source word in the period after 1961

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: *pretectum*, and finally two are the result of the previous action: *gorked* and *transgenic*.

Resulting word – noun

person	thing /abstract entity	animal / organism
10	12	2

Table 43: Classification of Type IV according to the meaning of the resulting word in the period after 1961

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.

6.1.4.3 Classification according to the complexity of back-formations

Composita	(incl. 4 neoclassical)	5
Simplicia	(including 12 monomorphemic)	9
Total		24

Table 45: Classification of Type IV according to the complexity of back-formations in the period after 1961

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.

6.1.4.4 Classification according to the suffix of the source word

-у	-ic	-ed	-al	others: -ous, -ar
10	8	2	2	2

Table 46: Classification of Type IV according to the suffix of the source word in the period after 1961

While in the material of the first half of the 20th 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 (piscivirous), -ar (supramolecular).

6.1.4.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 4.)

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*)

6.1.4.6 Specific features

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 18th and 19th centuries, but it appears to have died out, and this modern use is probably a new back-formation 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 back-formation.

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 back-formations where the resulting word is not shorter than the source word.

Skeeve is a word that has appeared before in the present analysis— in Type III (verb from adjective). This means that the adjective *skeevy* has produced by back-formation 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).

6.1.5 TYPE V: adjective from noun (6 items)

For the complete description of the material see Appendix III.

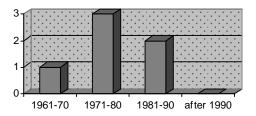
6.1.5.1 Classification according to the date of first occurrence (development over the period)

1961 - 1970: fluidic

1971 - 1980: complicit, desertified, intertextual

1981 - 1990: capitated, genethic

After 1990:



Graph 21: Quantitative distribution of Type V in individual decades of the whole period after 1961

This type forms one of the smallest groups in the second half of the 20^{th} century. There is no item found for the last period.

6.1.5.2 Classification according to the meaning of the source word

thing/abstract entity	state	action
4	1	1

Table 47: Classification of Type V according to the meaning of the source word in the period after 1961

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.

6.1.5.3 Classification according to the complexity of back-formations:

Composita		0
Simplicia	(no monomorphemic)	6
Total		6

Table 48: Classification of Type V according to the complexity of back-formations in the period after 1961

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*.

6.1.5.4 Classification according to the suffix of the source word

-s	-y /-ity	-ation
2	2	2

Table 49: Classification of Type V according to the suffix of the source word in the period after 1961

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: other suffixes (-y /-ity and -ation) occur in the same number of source nouns.

6.1.5.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 5.)

Situation in this class is very similar to that of the first half of the 20th century: there are neither colloquial or 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 (*genethic*). Only one item is explicitly indicated in the dictionary as a technical term (*intertextual*).

6.1.5.6 Specific features

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 back-formation but on derivation (fluid + -ic) in the 19th century.

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

6.1.6 Type VI: noun from another noun which is believed to be its derivative (12 items)

For the complete description of the material see Appendix III.

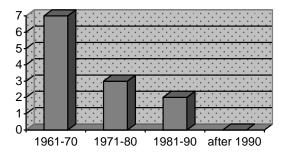
6.1.6.1 Classification according to the date of first occurrence (development over the period)

1961 - 1970: cineradiograph, cladist, grantsman, hyponym, idiotype, shrink-wrap, trunk

1971 - 1980: computer-phobe, intertext, homophobe

1981 - 1990: eco-label, fact-find

After 1990:



Graph 22: Quantitative distribution of Type VI in individual decades of the whole period after 1961

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

6.1.6.2 Classification according to the meaning of the source word and the resulting word

Source word - noun

action / process	abstract entity / state of mind
6	6

Table 50: Classification of Type VI according to the meaning of the source word in the period after 1961

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*).

Resulting word – noun

thing / abstract entity	action	person
8	1	3

Table 51: Classification of Type VI according to the meaning of the resulting word in the period after 1961

Most of the resulting back-formations 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.

6.1.6.3 Classification according to the complexity of back-formations

Composita	(including 5 neoclassical)	8
Simplicia	(including 1 monomorphemic)	4
Total		12

Table 52: Classification of Type VI according to the complexity of back-formations in the period after 1961

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.

6.1.6.4 Classification according to the suffix of the source word

-ing	-у	-ia	-(ual)ity	-ship	-ism
4	3	2	1	1	1

Table 53: Classification of Type VI according to the suffix of the source word in the period after 1961

The situation is opposite to that of the first half of the 20^{th} 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 just twice.

6.1.6.5 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 6.)

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*).

6.1.6.6 Specific features

The noun *fact-find* is among the latest back-formations (1989), however its source noun (*fact-finding*) dates back to the first decade of the 20th 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 back-formations from the first half of the 20th century.

In the case of the word *intertext*, we can see an interesting "gradation" of the backformation 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 20th century and added in the OED4 in 1993.

6.1.7 Type VII: prefix back-formations (8 items)

For the complete description of the material see Appendix III.

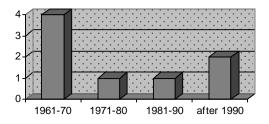
6.1.7.1 Classification according to the date of first occurrence (development over the period)

1961 - 1970: flappable, oxic, patriate, urb

1971 - 1980: pheresis,

1981 - 1990: plore

After 1990: concerting (2003), ilch (2003)



Graph 23: Quantitative distribution of Type VII in individual decades of the whole period after 1961

The group contains the same number of items as the material of the first half of the 20^{th} 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^{st} century.

6.1.7.2 Classification according to the semantic relation between the source and the resulting word

antonymy	hyponymy	complementarities	other
4	2	1	1

Table 54: Classification of Type VII according to the semantic relation between the source and the resulting word in the period after 1961

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 *pheresis* (resulting) is more general than *plasmapheresis* (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, 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).

6.1.7.3 Classification according to the part of speech of the resulting word

Part of speech	adjective	noun	verb
Total	4	3	1

Table 55: Classification of Type VII according to the part of speech of the resulting word in the period after 1961

Unlike the previous period, there are more adjectives than nouns; there is only one verb (patriate).

6.1.7.4 Classification according to the complexity of back-formations

Composita		0
Simplicia	(including 3 monomorphemic)	8
Total		8

Table 56: Classification of Type VII according to the complexity of back-formations in the period after 1961

There are no compounds; morphologically complex words prevail, e.g. *flappable*, *concerting* or *pheresis*. 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.

6.1.7.5 Classification according to the prefix of the source word

Situation here is very similar to that of the first half of the 20th 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 *plasmapheresis* 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*, *plasmasphere*, etc.

6.1.7.6 Classification according to the stylistic and regional connotation

(See Appendix IV, Table 7.)

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; *pheresis*, medicine)

6.1.7.7 Specific features

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 Kemmer¹⁵.

6.1.8 Type VIII: inflectional back-formations (2 items)

For the complete description of the material see Appendix III.

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. Both items finally appear to be neoclassical compounds, having combining forms (*giga-/mega-*) as their first constituents.

6.1.9 Type IX : adjective from agent noun (back-formations belonging to none of the above types) (3 items)

In the material from the second half of the 20th 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 back-formation. 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 back-formation, but it reminds of resufixation, i.e. back-formation followed by a new affixation: carburettor (carburet + -or) \rightarrow carburet (v.) \rightarrow 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)

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¹⁵ Results of this collection of neologisms are accessible at http://www.ruf.rice.edu/~kemmer/Words/info.html.

(D.com), we can assume back-formation here. The adjective *carbureted* 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 backformation. To be extremely explicit, in agreement with the semantic definition, we would expect a derivative "*carburetored*", 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 17th 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 back-formation 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 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).

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 back-formation: subtracting a suffix, resulting in a shorter form. The verb "to teenybop", logically expected as resulting from the agent noun does not exist, 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.

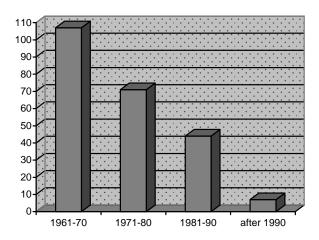
As the above examples show, there is certain regularity in the character of this "new" category, found in the material from the second half of the 20th century. The source word is an agent noun, the resulting one is an adjective. None of the words is stylistically neutral; *carburetted* is a technical 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.

6.2 Summarizing analysis of the sample of the period after 1961

6.2.1 Quantitative development of the process of back-formation over the whole period

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

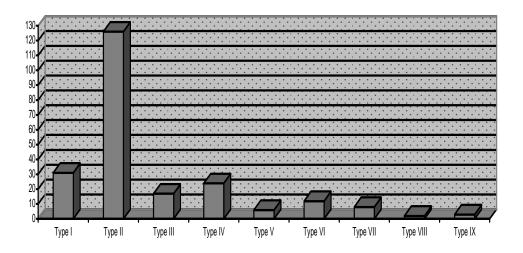
Table 57: Number of items in individual decades and the total number of all items in the period after 1961



Graph 24: Development of the process of back-formation over the period after 1961 – numbers of back-formations of all types found in individual decades

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 20th century is concerned, the research has confirmed our expectation that the highest number of back-formed words should be found for the first decade. Then, as shown in Graph 8, we can see a fairly smooth trend of decrease towards the end of the period.

6.2.2 Representation of individual types over the whole period



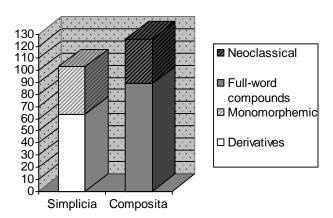
Graph 25: Representation of individual types over the whole period after 1961

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 a significant number, 31 and 24 respectively. The other types contain fewer items than twenty. Similar structure was discovered in the material from the first half of the 20th 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 back-formations (eight items), equal to the number of those identified in the previous period.

6.2.3 Morphological structure of the back-formed words over the whole period

	full-word	neoclassical	derivatives	monomorphemic
	compounds	compounds		words
Type I	17	2	2	10
Type II	58	22	38	8
Type III	8	2	2	5
Type IV	1	4	7	12
Type V	0	0	6	0
Type VI	3	5	3	1
Type VII	0	0	5	3
Type VIII	0	2	0	0
Type IX	2	0	1	0
Total	89 / 39 %	37 / 16 %	64 / 28 %	39 / 17 %
	126 / 55 %		103 45 %	
	229			

Table 58: Morphological structure of the back-formed words over the whole period after 1961



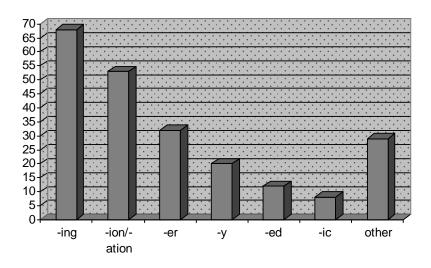
Graph 26: Shares of individual morphological structures over the whole period after 1961

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 back-formations in the given period). Within simplicia, which form 45 % of the whole material, derivatives prevail over monomorpemic words.

6.2.4 Representation of individual suffixes subtracted over the whole period

-ing	-ion/-ation	-er	-у	-ed	-ic	other
68	53	32	20	12	8	34

Table 59: Representation of individual suffixes subtracted over the whole period after 1961



Graph 27: Representation of individual suffixes subtracted over the whole period after 1961

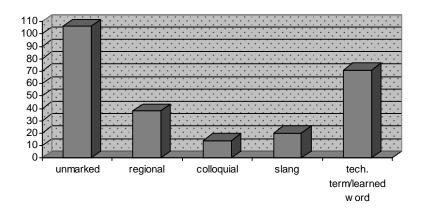
The most frequent suffix subtracted from the source words is -ing, occurring mainly in Type II (verb from action noun). Also the second most frequent suffix, -ion / -ation is involved mainly in Type II. The relatively high share of the suffix -er is especially due to the source agent nouns in Type I (and IX). 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.

6.2.5 Stylistic and regional connotation of back-formations over the whole period

	unmarked	regional	colloquial	slang	technical term / learned word	Total
Type I	15	7	1	7	7	37
Type II	64	14	3	4	46	131
Type III	6	5	0	2	1	14
Type IV	6	8	6	6	7	33
Type V	5	0	0	0	1	6
Type VI	7	1	1	0	4	13
Type VII	3	2	2	1	2	10
Type VIII	0	0	0	0	2	2
Type IX	0	1	1	0	1	3
Total	106	38	14	20	71	249
Percentage:	46 %	17 %	6 %	9 %	31 %	

Table 60: Stylistic and regional connotations of back-formations over the whole period after 1961



Graph 28: Proportions of unmarked and stylistically and regionally coloured words in the material 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.

This double connotation of some items in our material results in various percentage values which cannot make up 100% because of the overlap (cf. Chapter 5.2.5 above).

6.2.6 Conclusion

For the second half of the 20th century, **229** new back-formed words was excerpted, described and analysed. In their classification, Pennanen's original typology of six "traditional" types was applied, furthermore completed by three other types (Types VII – IX), for which a certain number of items were found in the material collected. We continued using Pennanen's typology and basic principles, namely for two reasons: firstly, we 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 ours 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^{th} century and main tendencies.

As far as the situation in the second half of the 20th 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 20th 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 20th 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. We 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: "queuejumping [f. queue n. + jumping vbl. n.]; Pushing forward out of one's turn in a queue; also fig.; Hence (as a back-formation) 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 back-formation. On the other hand, sometimes it is not easy do 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 back-formations are usually Americanisms, or words originated in the USA (31 out of 38). 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 of the second half of the 20th 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 (*Yuppy*). 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 our material were not explicitly interpreted in the dictionaries as back-formations (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 back-formation.

Some back-formed words of the second half of the 20th 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 back-formation only in one of their meanings (e.g. *fluidic*, adj., Type V, OED4: back-formation and derivation).

Prefix back-formations and inflectional back-formations continue producing new items during the second half of the 20th century. Three of the eight prefix back-formations are extremely recent: *plore* (1989), *concerting* (2003) and *ilch* (2003). The prevailing relation between the source and resulting word in Type VII is antonymy and the most frequent resulting part of speech is an adjective. The two words in Type VIII 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 back-formations (adjectives from agent nouns: *carburetted*, *do-good* and *teeny-bop*) have appeared in the research of the second half of the 20th century material, which seem to be different from the rest, and for which, therefore, we have established a new category, referred to as Type IX. It is only the matter of future time if such a category can vindicate its existence.

7. THE OVERALL PICTURE OF THE DEVELOPMENT OF BACK-FORMATION IN THE 20^{TH} CENTURY

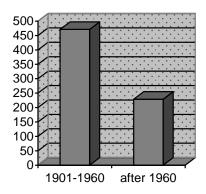
After collecting and evaluating all the necessary data, we can now compare the situation in the period for which the process of back-formation was described and analyzed by Pennanen (1966) and completed by an additional sample and its analysis in the present work (the beginning of the 20th century - 1960) with that of the second half of the 20th and the beginning of the 21st 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 back-formation at present**, to elicit the most typical features and tendencies including mainly:

- the dominant type of back-formation, 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 back-formation
- the prevailing stylistic and regional connotation of the resulting back-formations
- 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 back-formations that arose in the course of the second half of the 20th 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, we have collected, described, classified and analyzed **700 back-formations** for the whole period of the 20th and the beginning of the 21st centuries. Table 1 and Graph 1 show the quantitative shares of the two halves of the century and the final numbers regarding all 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	17	6	23
Type VI	26	12	38
Type VII	8	8	16
Type VIII	4	2	6
Type IX	0	3	3
Total	471 / 67 %	229 / 33 %	700

Table 61: Quantitative development of the process of back-formation over the whole 20th century

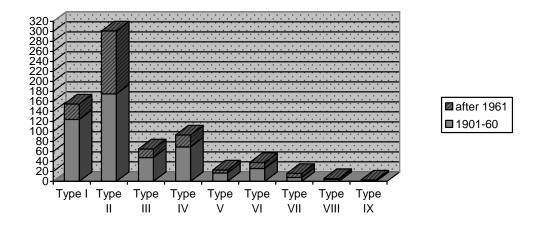


Graph 29: The quantitative shares of back-formations of the two periods during the 20th century

The number of back-formations 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 we have scrutinized a set of most authoritative updated dictionaries and several other sources providing the most recent vocabulary, the lower number of back-formations 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 we suppose that any research done in another forty to fifty years would reveal much 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 we have not revealed in other dictionaries. Nevertheless, the research was focused on the best established, authoritative and most comprehensive ones and we doubt that the number of such additionally found items would be significantly high. Thirdly, the period of the "second half" of the 20th century in the present research, actually, involves a slightly shorter time span than that of the preceding period – four decades of the 20th century and the beginning of the 21st 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's 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 back-formation 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 our opinion, it would be much more reliable, for example, to compare the quantity of the first half of the 20th 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 back-formation at present is concerned, **Type II** has kept its predominance till the second half of the 20^{th} century.



Graph 30: Representation of individual types over the whole century, indicating the shares of the 1st and the 2nd period.

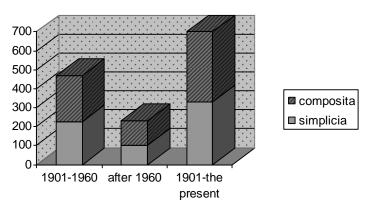
The main tendency that verbs represent the decisive result of this process of wordformation has been maintained. Verbs produced by back-formation mostly come from action
nouns, where the speed of growth is bigger than in any other type, or also from agent nouns,
which have slowed down their production since the fifties. While in the first half of the 20th
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. Back-formation of verbs from adjectives has almost become extinct.
On the other hand, back-formation of nouns from adjectives continues (Type IV),
representing the third most productive type. There is a significant decrease in back-

formation of adjectives from nouns (Type V); this trend was already apparent from Pennanen's sample in the first half of the 20^{th} century.

The situation in terms of the morphological structure of resulting back-formations 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**.

	1901-1960	1961-the present time	The whole century	
Type I	86	19	105 / 31 %	
Type II	93	80	173 / 41 %	
Type III	16	10	26 / 6%	
Type IV	25	5	30 / 10 %	
Type V	8	0	8 / 3 %	
Type VI	16	8	24 / 7%	
Type VII	0	0	0	
Type VIII	0	2	2 / 1%	
Type IX	0	2	2 / 1%	
Total	244	126	370	
	(of 471)	(of 229)	(of 700)	
Percentage in the sample of				
the respective period	52 %	55 %	53 %	

Table 62: Number of compounds in each period and in the whole century and the percentage share of individual types



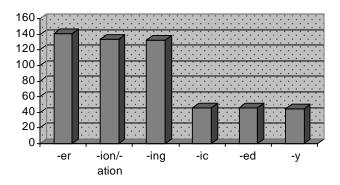
Graph 31: The proportion of composita and simplicia in the periods of 1901-1960, 1961-the present, and in the whole 20th century

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 back-formation, we can confirm that back-formation 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 back-formation over the whole century are: -er, -ion /-ation, -ing, -ic, -ed and -y.

Suffix	-er	-ion /	-ing	-ic	-ed	-y
		-ation				
1 st period	109	81	64	38	34	25
2 nd period	32	53	68	8	12	20
The whole 20 th C	141	134	132	46	46	45

Table 63: The most frequent suffixes in the process of back-formation in each period and in the whole 20^{th} century



Graph 32: The most frequent suffixes in the process of back-formation over the whole 20th century

The first three suffixes take part in the formation of verbs and confirm thus the idea of back-formation being one the main sources of new verbs in English. The suffix -er was the most frequent suffix subtracted in back-formation of the first half of the 20th century, it was almost exclusively involved in the formation of verbs from agent nouns. Since there has been so enormous growth of back-formations 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 back-formation (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 back-formations, 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 back-formation would not be complete without the description of **prefix back-formations** and **inflectional back-formations**, since they continue arising at present. Sixteen items of Type VII (prefix back-formations) 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 back-formations 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 so called Type IX in our 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 20th century has confirmed the movement of language from potential back-formations up to their institutionalization and attesting in the dictionaries. Three back-formations 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 our 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 back-formation has brought interesting findings about the development of this word-formation process from the beginning of the 20th century till the present time. It is not, however, a closed process. As early as now, new back-formations 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.

8. BACK-FORMATIONS AMONG NEOLOGISMS

So far, we have investigated words that are directly labelled in dictionaries as the result of back-formation. First, analysis was made of the material from the first half of the 20th century, not included in Pennanen's sample; then it was evaluated together with what Pennanen concluded for the period given. Furthermore, relevant material from the second half of the 20th century was collected, described and analysed in order to arrive at the overall picture of the development of back-formation in the 20th and the beginning of the 21st century.

The research period referred to as the second half of the 20th century starts where Pennanen's collection ends – in the 1960s - and the process of back-formation has been monitored until the present time, i.e. the first decade of the 21st century. The respective sample also contains several very recent back-formations – neologisms from the most recent decades since the 1980s. Apart from the updated traditional authoritative dictionaries (OED4, Merriam Webster's and others, see Appendix III), the main sources from which we 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 the present chapter referred to as "Ayto", "RUH" and "BCU", respectively.

When studying the neologisms, we 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 back-formation 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 back-formation in the sample from the second half of the 20^{th} century. Words like *dollarize* and others (referred to as "unconfirmed back-formations") are introduced, described and analyzed in the present chapter. Altogether we have found 8 such words; each supposed back-formation is supported by a comparable example of a confirmed back-formed word found in the material from the second half of the 20^{th} century.

This chapter furthermore deals with another sample of words. They are called "potential back-formations", 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 back-formation 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 back-formations 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 our typology. For example, Ayto (1990) introduces the noun *Disneyfication* (1989) "trivializing commercialization, involving the transformation of genuine events, places of true historical interest, etc. into quaint pastiches". Based on the suffix of the noun and the existence of confirmed analogical pairs (e.g. biomagnification > biomagnify), it was hypothesized that the word might belong to Type II (action noun > verb) and produce a back-formed verb to Disneyfy "to subject to Disneyfication". Each such pair - the existing source word and its potential resulting back-formation - was then described formally, semantically and stylistically and included in the overall analysis of the whole sample. As a result of this research, we have created, described and analyzed a sample of 60 potential back-formed items. The aim of such an analysis is to predict what might happen in back-formation 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), we could not content ourselves with a mere statement of "what *might* happen" and wanted to find out what *is actually happening* now regarding the potential back-formations that we had generated. So, the final step in the research on neologisms was to consult a source that is living and absolutely up to date: the Internet. Using the Google search engine we searched for each of the 60 potential items and discovered that 25 of them were actually used by speakers

(or more precisely, writers), mainly in the Internet discussions or articles. Admittedly some of them may have been used ad hoc and need not be used again, but the fact that they have been formed by the language users is a good confirmation that our hypothesis was proceeding in a correct direction.

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

- Unconfirmed back-formations among dictionary neologisms and their classification (8 items)
- 2. **Potential** (hypothetical) back-formations from neologisms and their analysis (60 items)
- 3. **Google-confirmed** hypothetical back-formations those originally potential back-formations 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 we think that these collections are not as extensive as those of the previously presented material, and that they deserve specific commentaries and analyses.

8.1 Unconfirmed back-formations among dictionary neologisms and their classification

8.1.1 Type I: verb from agent noun (1 item)

1. blush

Ayto: 1988, tr. v. f. blusher n.; to apply blusher to

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^{th} century is, e.g. volumize < volumizer ("to apply a volumizer to hair to increase its volume").

8.1.2 Type II: verb from action noun (4 items)

1 dollarize

MW's 11th CD: after **1982**, v. f. *dollarization* n.: Economics: to adopt the U. S. dollar as a country's official national currency

2 eco-renovate

BCU: **2006**, v. f. *eco-renovation* n.; to renovate (especially a home) in an environmentally and budget-friendly way, regarding, e.g., energy efficiency

3 gazunder

Ayto: **1988,** v. f. *gazundering / gazunderer* action / agent n.; (of a house-buyer) to reduce the price offered to (a seller) for a property, esp. shortly before exchange of contracts, threatening to withdraw if the new offer is not accepted; also, to swindle in this way; inspired by *gazumping* ("practice of swindle")

4 sandsurf

BCU: 2007, v. f. sandsurfing n.; to use a snowboard and ride down a dune in a desert

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 11th CD). The word is morphologically complex and is labelled as a term of economics. A similar example found in the material from the second half of the 20th 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 docummentary 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 20th 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 20th century is, e.g. *snowboard* < *snowboarding* ("to participate in snowboarding").

8.1.3 Type IV: noun from adjective (3 items)

1. bilat

Ayto: **1989**, n. f. *bilateral* adj. (f. bi- prefix2 1, 6 + lateral, f. L. later- (nom. latus) side); bilateral meeting, probably informal

2. cat

Ayto: 1989, n. f. catalytic adj.; catalytic converter

3. decaf

Ayto: 1988, informal: decaffeinated coffee

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 back-formation, 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 4.3.4).

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*.

8.1.4 Conclusion

There are eight items among the dictionary-attested neologisms which seem to be the result of back-formation, although they are not labelled in the dictionaries as such. Half of them belong to Type II (verbs from action nouns) and one item is of Type I (verb from agent noun). The remaining three items classified as Type IV vary between back-formation and mere shortening.

8.2 Potential (hypothetical) back-formations from neologisms

The following 60 items are hypothetical back-formations 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 back-formation 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 20th 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.

8.2.1 TYPE I: verb from agent / instrument noun (13 items)

- **1.** *blat < blatter (or blatting)
- to drive on unsurfaced country roads as a hobby;

blatter n., 1989; Slang: a person whose hobby is driving on unsurfaced country roads, also a kind of vehicle used for the hobby, green laner

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

- **2.** ***boy-toy** < *boy toyer*
- to have a young male lover

boy toyer n., 1989; informal: an older woman who has 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

comper n., 1988; chiefly British; a person who regularly enters competitions of the sort run by newspapers and magazines, etc. / the hobby of entering competitions

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

conducer n., 1989; an individual who combines characteristics of consumer and producer (a blend); esp. in broadcasting by satellite, cable, etc.

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

5. *daytime < daytimer

- to go to daytimers

daytimer n., 1989; 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

doper n., 1988; someone who transports or traffics 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

fuzzbuster n., 1988; slang, Americanism: an electronic device for detecting 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

green laner n., 1989; a person whose hobby is driving on unmetalled country roads and trackways

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

9. *monkey-wrench < monkey wrencher

- to obstruct or spoil sth.

monkey wrencher n., 1990; American slang: a person who obstructs or spoils 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

pre-lightener n., 1989; hair bleach

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

11. *upski < upskier

- to ski uphill

upskier n., 1990; someone who skis uphill (using a small parachute for harnessing the power of the wind to propel them up to the mountainside)

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

12. *wallpeck < wallpecker

to chip pieces off the Berlin Wall

wallpecker n.; 1990; a private individual who chipped pieces off the Berlin Wall when it was in the process of demolition 1989-90

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

13. *stonepeck < stonepecker

- synonym to *wallpeck*

stonepecker n.,1990; synonym to wallpecker

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

8.2.1.1 Classification of potential Type I back-formations by source word characteristics

The following tables summarize the features characterizing the source words of the potential Type I back-formations.

AGENT (person)	INSTRUMENT (inanimate)
blatter	daytimer
boy-toyer	fuzzbuster
comper	pre-lightener
conducer	
doper	
green-laner	
monkey-wrencher	
upskier	
wallpecker	
stonepecker	
10	3

Table 64: Classification of Type I according to the meaning of the source word (potential backformations)

Composita	(no neoclassical) 7
Simplicia	(including 4 monomorphemic) 6
Total	13

Table 65: Classification of Type I according to the complexity of the source word (potential backformations)

-er	other	
13	0	

Table 66: Classification of Type I according to the suffix of the source word (potential back-formations)

Item	unmarked	regional connotation	historical association	colloquial	slang	Total
blatter					X	1
boy-toyer				X		1
comper	Х	British				2
conducer	X					1
daytimer	X					1
doper		orig. U.S.				1
fuzzbuster		Americanism			X	2
green-laner	X					1
monkey-		Americanism			X	2
wrencher						
pre-lightener	X					1
upskier	X					1
wallpecker			reference to Berlin Wall			1
stonepecker			reference to Berlin Wall			1
Total	6	4	2	1	3	16

Table 67: Classification of Type I according to the stylistic and regional connotations (potential backformations)

8.2.1.2 Commentary

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 is bound to be different. None of the existing meanings is related to the agent / action noun (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 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 and 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 back-formation 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 20th 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 in common 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^{th} century, where there are three technical terms out of fifteen items.

8.2.2 TYPE II: verb from action noun (30 items)

1. *backyard < backyardism

- (of a small country) to be under influence of a large economically powerful country backyardism n., 1988; the influence of a large economically powerful country on its smaller neighbours

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

2. *casual < casualism

- to employ casual labour

casualism n., 1989; the employment of 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

cocooning n., 1988; living a safe, unadventurous, home-based life

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

4. *cold-faxing

- to send unsolicited material by fax

cold-faxing n., 1988; the sending of unsolicited material by fax

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

5. *destatizate / destatisate < destatization / destatisation

- (of the state) to withdraw from large areas of the economy that were hitherto state-controlled destatization / destatisation n., 1990; (in communist or former communist countries) the withdrawal of the state 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

Disneyfication n., 1989; = 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. *downmarketing

- to conduct advertising strategy aimed at lower socioeconomic groups downmarketing n., 1988; 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

eco-labelling n., 1989; 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

fax-napping n.; 1989; the stealing of 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

flash-forwarding n., 1989; 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

gas-flushing n., 1989; a method of 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

goldfishing n., 1990; the practice of illustrating 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

grockling n., 1989; visiting places of interest as a tourist

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

16. *infotain < infotainment

-to present information in an entertaining way

infotainment n.,1980; broadcast material which seeks to inform and entertain simultaneously; information presented 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.

joy-firing n., 1989; the celebratory firing guns

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

18. *lightweight < lightweighting

- to use light materials for packaging

lightweighting n., 1988; the use of 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

marketization n., 1989; transformation into a free-market economy

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

20. *monoboard < monoboarding

– to ski downhill on a single large ski

monoboarding n., 1988; the sport of skiing 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

parapenting n., 1989; the sport of jumping 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

slice-colouring n., 1989; a thin line of colouring applied 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 < snowsurfing

- to participate in snowsurfing

snowsurfing n., 1988; 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

spasing n., 1989; door-to-door selling in which the salesman pretends 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

step-parenting n., 1989; being a step-parent; looking 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

tariffication n., 1989; conversion into 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

taxing n.,1990; slang: mugging 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. *videoswiping

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

videoswiping n., 1989; the extraction of images from films and videotapes that are used to compose a hologram

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

29. *Vogue < Vogueing / Vogueing

- to dance in a style of Voguing

Voguing / Vogueing n., 1988; the a 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

water-walking n., 1989; a form of water aerobics involving walking in water

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

8.2.2.1 Classification of potential Type II back-formations by source word characteristics

action /process	product /result /state
28	2

Table 68: Classification of Type II according to the meaning of the source word (potential backformations)

Composita	(incl. 6 neoclassical)	20
Simplicia	(incl. 5 monomorphemic words)	10
Total		30

Table 69: Classification of Type II according to the complexity the source word (potential backformations)

-ing	-ation	-ism	-ment
23	4	2	1

Table 70: Classification of Type II according to the suffix of the source word (potential backformations)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/learned word	
backyard					Politics	1
casual	X					1
cocoon	X					1
cold-fax	X					1
destatizate	X					1
Disneyfy	X					1
downmarket					Commerce	1
eco-label	X					1
fax-nap	X					1
filo-nap	X					1
flash-forward					Literary Theory	1
gas-flush	X					1
goldfish					TV Broadcasting	1
green-label	X					1
grockle				X		1
infotain		orig. U.S.				1
joy-fire	X					1
lihtweight	X					1
marketize	X					1
monoboard	X					1
parapent(e)	X					1
slice-colour	X					1
snowsurf	X					1
spas	X					1
step-parent	X					1
tariffy	X					1
tax				X		1
wideoswipe	X					1
Vogue		orig. U.S.				1
water-walk	X					1
Total	22	2	0	2	4	30

Table 71: Classification of type II according to the stylistic and regional connotations (potential backformations)

8.2.2.2 Commentary

The present sense of *casualism* is new; the noun was used in the 19th 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 back-formations 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.

8.2.3 TYPE III: verb from adjective (4 items)

1. *bladder < bladdered

- to get drunk

bladdered adj., 1990; Slang: drunk

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

2. *expense < expensed

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

expensed adj., 1989; having all expenses paid (by the employer)

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 *man-trained* adj., 1989; (of a dog) trained 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) \leq Ponting

- to leak secrets from a government department to the press

Ponting pres. ppl., 1988; leaking 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

8.2.3.1 Classification of potential Type III back-formations by source and resulting word characteristics

result	relating to an action
3	1

Table 72: Classification of Type III according to the meaning of the source word (potential backformations)

Composita	(no neoclassical)	1
Simplicia	(all monomorphemic)	3
Total		4

Table 73: Classification of Type III according to the complexity of the source word (potential backformations)

-ed	-ing
3	1

Table 74: Classification of Type III according to the suffix of the source word (potential backformations)

	unmarked	regional connotation	colloquial	slang	technical term /learned word
bladder				X	
expense	X				
man-train	X				
Pont					Politics
Total	2	0	0	1	1

Table 75: Classification of Type III according to the stylistic and regional connotations (potential backformations)

8.2.3.2 Commentary

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 20th 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.

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, *mantrain* is a potential compound verb.

8.2.4 TYPE IV: noun from adjective (no items)

Surprisingly, no potential back-formations 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 20th 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.

8.2.5 TYPE V: adjective from noun (2 items)

1. *biodiverse < biodiversity

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

biodiversity n., 1988; range of distinct living species

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

*disfluent / dysfluent < disfluency /dysfluency

- characterized by a lack of fluency in speech

disfluency /dysfluency n., 1989; clinical impairment or lack of fluency in speech

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

8.2.5.1 Commentary

This category also belongs to the least numerous ones in our research: only twenty-two items have been found for the whole 20th 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.

8.2.6 Type VI: noun from another noun which is believed to be its derivative (6 items)

1. *collectomane < collectomania

- a person who cannot resist collecting or accumulating things *collectomania* n., 1986; an irrestible urge to collect or accumulate 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 *cross-ownership* n., 1988; the simultaneous owing of a controlling interest in a newspaper and a broadcasting station (= forbidden in the USA)

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 *girocracy* n., (British) the group of people who are dependent on social-security payments Mirror word: *telepath* < *telepathy*; one who believes in telepathy

4. *Gorbymania

a person who is extremely enthusiastic about President Mikhail Gorbachev of the USSR
 Gorbymania n., 1989; extreme public enthusiasm for 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
 radiophobia n., 1988; 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 *videocracy* n.,1989; a government that operates mainly or characteristically via television Mirror word: *telepath* < *telepathy*; one who believes in telepathy

8.2.6.1 Classification of potential Type IV back-formations by source (and resulting) word characteristics

Source word - noun

state of mind	a group of people	state
3	2	1

Table 76: Classification of Type VI according to the meaning of the source word (potential backformations)

Resulting word – noun

person
6

Table 77: Classification of Type VI according to the meaning of the resulting word (potential backformations)

Composita	(including 5 neoclassical)	6
Simplicia		0
Total		6

Table 78: Classification of Type VI according to the complexity of the source word (potential backformations)

-ia	-у	-ship
3	2	1

Table 79: Classification of Type VI according to the suffix of the source word (potential backformations)

Item	unmarked	regional	Total
		connotation	
collectomania	X		1
cross-ownership	X		1
girocracy		British	1
Gorbymania	X		1
	(historical)		
radiophobia	X		1
videocracy	X		1
Total	5	1	6

Table 80: Classification of type VI according to the stylistic and regional connotations (potential backformations)

8.2.6.2 Commentary

There are two potential back-formations 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 occupy a special place in our 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.

8.2.7 Type VII: prefix back-formations (2 items)

- **1.** *customed adj. < un-customed adj.
- (of goods) having had the customs duty paid

un-customed adj., 1988; West Indian: (of goods) having had no customs duty paid; contraband 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 *unscoopy* adj., 1989; informal: lacking exclusive news stories

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

8.2.7.1 Commentary

This type contains only two potential back-formations, both being adjectives based on the relation of antonymy, expressed by the prefix *un*-. Their source words are marked: *uncustomed* 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".

8.2.8 Type VIII: inflectional back-formations (2 items)

1. *politrick n. < politricks

- an individual action within the practice of politricks

politricks n. pl., 1989; Jamaican: 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 *sweats* n. pl., 1988; American informal: a tracksuit Mirror word: *bicep* < *biceps* pl. n. (see previous)

8.2.8.1 Commentary

Only two potential items have been found in our material of neologisms. Both the source words 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). Our hypothesized backformations 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.

8.2.9 Type IX: adjective from agent noun (1 item)

1. *cruciverbal < cruciverbalist

- related to crosswords, e.g. cruciverbal arrangement, style *cruciverbalist* agent n., 1988; 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

8.2.9.1 Commentary

Type IX 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.

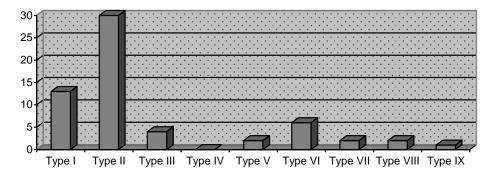
The potential adjective is supported by the existing item *do-good* < *do-gooder*, where the agent suffix was subtracted, similarly as it is suggested here.

8.3 Summarizing analysis of the potential back-formations formed from neologisms of all types

8.3.1 Quantitative distribution of individual types of potential back-formations

	number of potential back-formations
Type I	13
Type II	30
Type III	4
Type IV	0
Type V	2
Type VI	6
Type VII	2
Type VIII	2
Type IX	1
Total	60

Table 81: Quantitative distribution of individual types of potential back-formations



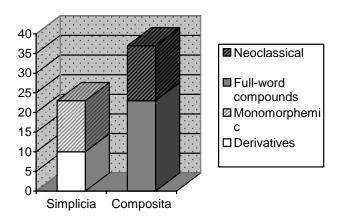
Graph 33: Quantitative distribution of individual types of potential back-formations

Type II is the most numerous group of potential back-formations. 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 back-formations during the 20th century. One item has been suggested for the newly added Type IX.

8.3.2 Morphological structure of potential back-formations

	full-word	neoclassical	derivatives	monomorphemic
	compounds	compounds		words
Type I	7	7 0		4
Type II	14	6	5	5
Type III	1	0	0	3
Type IV	0	0	0	0
Type V	0	1	1	0
Type VI	1	5	0	0
Type VII	0	0	2	0
Type VIII	0	1	0	1
Total	23 / 38 %	14 / 23 %	10 / 17 %	13 / 22 %
	37 / 61%		23	3 / 39%

Table 82: Morphological structure of potential back-formations



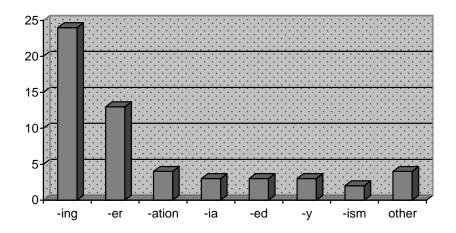
Graph 34: The shares of individual morphological structures of potential back-formations

The situation here is rather similar to that in the whole of the 20^{th} 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^{th} century.

8.3.3 Representation of individual suffixes involved in forming potential backformations

-ing	-er	-ation	-ia	-ed	-у	-ism	other
24	13	4	3	3	3	2	4

Table 83: Representation of individual suffixes involved in forming potential back-formations



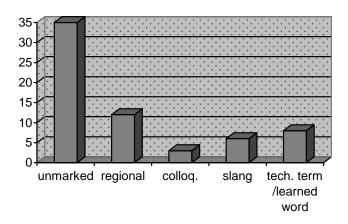
Graph 35: Representation of individual suffixes involved in forming potential back-formations

Representation of individual suffixes involved in the process of possible back-formation 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 20th 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 20th century in the second place). Suffixes described as "other" are: *-ist*, *-ity*, *-ment* and *-ship*.

8.3.4 Stylistic and regional connotation of potential back-formations

	unmarked	regional	colloquial	slang	technical term /
					learned word
Type I	5	6	1	3	0
Type II	22	2	0	2	4
Type III	2	0	0	1	1
Type IV	0	0	0	0	0
Type V	0	0	0	0	2
Type VI	5	1	0	0	0
Type VII	0	1	1	0	0
Type VIII	0	2	1	0	1
Type IX	1	0	0	0	0
Total	35	12	3	6	8
Percentage:	58 %	20 %	5 %	10 %	13 %

Table 84: Stylistic and regional connotations of potential back-formations



Graph 36: Representation of unmarked and stylistically and regionally coloured potential backformations

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, we would have to examine dedicated collections of neologisms. This poses a challenge for further possible research on back-formation.

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

8.3.5 Conclusion

In this part of the research, 60 potentially back-formed words have been suggested and analyzed. 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 back-formations 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 revaluation described in the literature is the word *burgle* < *burglar*. This also applies to many back-formations that have been found and analysed in the present work for the period of the 20th 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 back-formations is supported by several examples of back-formed words in our material from the 20th 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 back-formations: *job-hunt < job-hunting* (1946), *teleprint < teleprinter* (1971) and *skirt-chase < skirt-chaser* (1981) (cf. Chapter 4 above).

8.4 Google-confirmed hypothetical back-formations

In the previous stage of our research, we collected 60 hypothetical back-formations which might be formed from neologisms. The hypothesis predicting their existence was made on the basis of the typology that had been suggested by Pennanen (1966) and applied and further developed in our research and analysis of back-formations of the 20th and the beginning of the 21st century.

The following list contains 25 words which were singled out in the present work as hypothetical back-formations 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 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.

8.4.1 TYPE I: verb from agent / instrument noun (4 items)

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

www.urbandictionary.com/define.php?term=blatting; accessed on 28.03.2011:

'to **blat**: to travel (either by car, bike or foot) in a reckless and eratic 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; 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; accessed on 28.03.11:

'A verb meaning that someone/something has totally messed up your plans and/or what you were working on. That is: they threw a monkey wrench into your plans/work.

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; accessed on 28.03.11:

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

8.4.2 TYPE II: verb from action noun (13 items)

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-

thornton.co.uk/thinking/elevate/index.php/elevate_templates/article/the_north_goes_mad_for decentralised_media/; 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; 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=FAA6A4503A07565AD031 D1E7BDEB71F3.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; 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.forteantimes.com/forum/viewtopic.php?p=579678&sid=8fa6c274f1091ac020a1af 2164d06a6b; 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 soley 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.'

8.4.3 TYPE V: adjective from noun (2 items)

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.

8.4.4 Type VI: noun from another noun which is believed to be its derivative (3 items)

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.'

8.4.5 Type VII: prefix back-formations (1 item)

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

http://www.british-history.ac.uk/report.aspx?compid=70711; accessed on 29.03.11:

The Trotts 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.

8.4.6 Type VIII: inflectional back-formations (1 item)

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.'

8.4.7 Type IX: adjective from agent noun (1 item)

1. **cruciverbal** < *cruciverbalist*

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.

8.4.8 Commentary

Out of the 60 suggested potential back-formations, 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.

	potential	confirmed	= % of potential
Type I	13	4 (3 compounds)	31 %
Type II	30	13 (9 compounds)	43 %
Type III	4	0	0
Type IV	0	0	0
Type V	2	2 (1 compound)	100 %
Type VI	6	3 (3 compounds)	50 %
Type VII	2	1	50 %
Type VIII	2	1 (1 compound)	50 %
Type IX	1	1 (1 compound)	100 %
Total	60	25 (18 compounds)	42 %

Table 85: The percentage share of confirmed back-formations in the sample of originally potential ones

Traditionally, verbs from action nouns (Type II) include a large number of back-formations. Another interesting fact is that in the smallest classes (Type V, adjectives from abstract and action nouns, and Type IX, 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 VI-VIII, nouns from other nouns, prefix back-formations and inflectional back-formations) at least a few items have been confirmed. The only class for which we 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 (18 compounds out of 25 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 backformation forcibly illustrates the cycle of back-formation 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 back-formation in a dictionary as entry word or subentry and thus presenting it as a unit of vocabulary of the given language).

The results of the present research on neologisms suggest certain possible tendencies of future development:

- 1. The predominance of Type II (verbs from action nouns) will probably continue it is the most easily functioning process, and the richest source for forming new verbs (apart from conversion).
- 2. Type IV (nouns from adjectives) will probably remain at the same level; there was a slight increase in this type in the 20th century, but no instances are represented among potential items from neologisms at all.
- 3. Type I (verbs from agent nouns) seems to be decreasing in quantity, perhaps as a result of competition with Type II.
- 4. The suffix *-ing* appears with increasing frequency and becomes more and more often involved in the process of back-formation (apart from other "strong" suffixes *-er* and *-ion / -ation*).
- 5. Stylistically unmarked words will probably form the main volume of back-formed words, but technical and scientific words have also potential to yield back-formations.

6. Compounds are likely to become an increasingly frequent source of (compound) backformation.

We must not forget that many new back-formations 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 20th century, and on the actual back-formed items (see Chapter 10).

Nevertheless, the analysis of potential back-formations 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 back-formation 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 back-formations and are also easily applicable to the study of the most recent nonceformations.

CONCLUSION

The objective of the present work was to provide a comprehensive description and analysis of English back-formation in the 20th and the beginning of the 21st 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 the present study, among other things, examined whether a process comparable to English back-formation obtains in Czech and came to the conclusion that a morphological process that would be entirely identical to English back-formation 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 back-formation (bearing some similarity to the process in English), but the word-formation types involved are different from those formed in English back-formation.

The core of the present study 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. Based on the analysis of the contemporary situation and on the results of the research of neologisms arising in the process of back-formation, the prevailing tendencies expected for the nearest future have been drawn, too, and the possible topics for further research suggested.

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

- a sample of 225 back-formations collected by Pennanen in his study (1966) for the first half of the 20th 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 period, i.e. from the 1960s
 till now
- a sample of 8 items of the second period which have been identified as backformations although not explicitly so labelled in the dictionaries or other sources, being recognized by means of our method, which is a combination of Pennanen's original typology and rules on the one hand and our additional types and characteristics resulting from the present research on the other

a sample of **60** hypothetical back-formations – items not attested in the dictionaries but having all the makings of future back-formations formed from neologisms by this word-formation process. Using contemporary live informal communication on the Internet as feedback it was possible to establish that out of the 60 hypothetical words 25 have been actually used by English speakers / writers, an indication that the applied method of description has a positive predictive value as well.

In the research we approached the subject matter from both diachronic and synchronic points of view. In order to achieve the aims and acquire relevant information, we 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 we could collect a sufficient amount of relevant material. Apart from the dictionaries we made use of other sources, especially those dealing with neologisms which we saw as an important part of our sample. In the selected dictionaries, we were primarily looking for words labelled explicitly as back-formations (a sign of consensus on their status). In that stage of the research, the diachronic approach was inevitable: we had to compare the dates of occurrence of the source words and the resulting back-formations. However, not always was the sought-for form entered as a headword; sometimes it was listed as one of its (back-)derivatives, so we 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 we 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, we 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 back-formation 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 (back-formation) 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 back-formation 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. However, Pennanen's original typology including six basic types of back-formations (verbs from agent nouns, verbs from action nouns, verbs from adjectives, nouns from adjectives, adjectives from abstract or action nouns and nouns from other, morphologically more complex nouns) was extended in the present work by three more types: prefix back-formations, inflectional back-formations and a class of adjectives formed from agent nouns. As far as the prefix back-formations and inflectional back-formations are concerned, Pennanen does not consider these as relevant items because, in his opinion, the change that occurs here does not involve the internal form of the word: in the case of words formed by subtraction of the prefix he speaks of mere shortening as the resulting word is on the same level as the source word (they have the same internal form); in the case of inflectional back-formations he says that only one element (number) of the internal form is affected, while the semantic structure remains intact. In the present study, however, we have included both these types in our material and added them to the original typology as Types VII and VIII. They are generally referred to as examples of back-formation in the literature by various authors (e.g. Bauer, 1983, Katamba, 2006) and we 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 back-formations found in our 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 back-formations in our material result from the subtraction of either real or wrongly interpreted plural suffixes. They are monomorphemic and stylistically neutral.

In addition, we extended Pennanen's original typology by one more type of back-formations, namely adjectives from agent nouns. The category is small but there were several factors that led us to consider it a new type. Firstly, one potential item of this type was found for the first period: *paratroop*. We 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 V 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 20th 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 back-formations 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 IX. These findings have finally yielded an answer to the question formulated at the end of chapter 6.1.5.6 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 we do not include in our typology, although they are referred to as instances of back-formation 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 back-formations 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 our opinion, one of the basic principles of back-formation distinguishing this process from other types of shortening. This balancing between a mere shortening and a back-formation is also reflected in our own research when analyzing the sample of "suspect" but unconfirmed back-formations: 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 back-formations 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 back-formation, 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 back-formations 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
- stylistic value of all items

On the basis of the detailed description and analysis of the whole material we are able to give a comprehensive account of the development of this word-formation process from the beginning of the 20th century until today, to compare the samples of the two individual periods and highlight the most typical features of back-formation at present. In addition, we can also draw conclusions about the expected further development of this process.

The first half of the 20th century was extremely productive in terms of back-formation. In fact it can be seen as the most productive period so far. The sample of items from the latest period (from the 1960s onwards) is much smaller, though if truth be told it is not strictly speaking objective to compare the productivity of the most recent period with that of the previous ones. The vocabulary of the older period is more stable and recorded more completely; some later additions in OED4, for example, formed in the first half of the 20th century, were made as late as the 1990s or the beginning of the 21st century. In fact, the sample of the latest period forms one third of the material of the whole 20th century (229 out of 700). At the same time, however, we have to realize that the original sample of backformations of the first half of the 20th century collected and described by Pennanen amounted to 225 words, which is almost the same size as that of our own sample for the second period (229). The high number of back-formations dating from the first period (471) was actually reached by counting in our additional sample (246 items) for the same period collected at present. Seen from this perspective (the same as was available to Penannen at the time of his analysis), we may regard the productivity of back-formation as remaining on the same level as it was in the first half of the 20th century. We can expect that our present sample will increase if someone decides to check the number of back-formations in this period in forty to fifty years from now. This finding also supports our 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 back-formation is the formation of verbs from action nouns: it remained such over the whole 20th century and, based on the investigation among neologisms, we can conclude that this tendency shows signs of becoming even stronger in the future. In fact, we can speak of a rather dramatic growth of back-formations 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 back-formations (50 %) and even in the sample of potential back-formations (50 %), and the subsequently confirmed ones in informal communication (43 %).

Formation of verbs from agent nouns was fairly frequent in the first half of the last century; it made up 26 % of all back-formations, but its share has decreased significantly - to a mere 14 % in the second half. Back-formation of verbs from adjectives almost disappeared during the 20th century and the estimated tendency for the future is not very favourable either – there are neither any items in the sample of unconfirmed back-formations, nor among the confirmed potential ones.

Adjectives can be seen as a minor source of back-formed nouns, 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 20th century – we 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 back-formations represent 55 % of all items in the material of the second period against 52 % in the first period; similarly they form a major portion among the potential back-formations deriving from neologisms as well as a large part of the confirmed ones.

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 back-formation 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.

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 20th century reflects the same process as the one that occurred in the peaks of recorded back-formations in history (the middle of the 17th century and in the 19th century): borrowed suffixed nouns resulting in the subsequent need for the respective verbs, which triggered the process of back-formation. Examples of such back-formations 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. This tendency has been kept up from the first period.

The description and analysis of the process of back-formation in the latest period as well as the investigation of neologisms have shown that prefix back-formations, which generally represent a minor class, continue to be formed. On the other hand, the type described as inflectional back-formations appears to be in continuing decline as the sources seem to be exhausted. However, new computer technologies may be able to tap new sources. The class of adjectives back-formed from agent nouns is a new type that might continue in occurrence, but this prognosis needs a longer time to be confirmed.

Apart from the above major findings, the research has revealed several other things. Some of the back-formations that Pennanen indicated as non-existent but potential at the beginning of the 20th century have come into use since that time (*job-hunt*, 1946, *teleprint*, 1971 and *skirt-chase*, 1981) and are good examples of the continuous developments in language. His prediction of the potential existence of these items was based on the same principles as our own research on neologisms, which led to the suggestion of 60 potential back-formed new words and the subsequent confirmation of 25 of them (42 %) as really existing in informal communication, although they are not attested in dictionaries yet. Among

the confirmed items, the absolute majority is made up of back-formed verbs (17 out of 25), of which most have been formed from action nouns. Over a half of the items in this sample are compounds; the suffix -ing occurs in one third of the source words. Stylistically, the confirmed items are, of course, on the level of informal, jocular, ad hoc, ironic or very tentative use of language and need not be fully accepted by all users in the future. These data are in agreement with the major findings of the research in terms of the main samples and indicate the direction of the probable future development of this process. Confirmation of such a large proportion of the suggested potential back-formations lends support to the claim that the typology and principles used in the present research are sound and functional.

On the ground of the findings produced by our research, we can therefore summarize its major results in the following way:

- Productivity of back-formation remains at the same level as it was in the first half of the 20th century.
- The most productive process within back-formation is the formation of verbs from action nouns; in fact we can speak of a rather dramatic increase in back-formation from action nouns at present, compared to the beginning of the 20th century, making it an important source of new verbs in English.
- Back-formation of verbs from agent nouns has decreased significantly.
- Back-formation 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 back-formation.
- Stylistically unmarked items prevail, but they are often limited in use.
- Prefix back-formations continue to be formed.
- Inflectional back-formations 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 backformation. 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 back-formation.

In the preceding paragraphs, we have summarized the main findings of our research. 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 back-formation. As it has shown, the situation in a particular time period can look different from different vantage points in time. The survey of back-formed items of the second half of the 20th century will be definitely different in a few decades, as those items which are only potential now might become actual, and others might disappear from the lexicon. The extra-linguistic reality may decisively affect the direction of this process. An example, at this moment, can be seen in the decrease of the share of agent nouns in favour of action nouns in the formation of verbs, presumably as a reaction to the growing dynamism of contemporary society.

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

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RESUMÉ

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 768 jednotek. Ten obsahuje pět vzorků menších:

- 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 našeho výzkumu na straně druhé.

vzorek 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. Ze 60 hypotetických zpětných derivací bylo tímto způsobem potvrzeno 25 skutečně užitých takto utvořených slov anglicky mluvícími účastníky diskusí či autory článků.

Při zkoumání daného jevu byl uplatněn jak diachronický, tak synchronický přístup. K získání dostatečného objemu aktuálních odborných informací byla nejprve prostudována příslušná odborná, a to zejména současná literatura. Aby byl k výzkumu shromážděn dostatečný počet relevantních slov, byla prozkoumána řada obecných jazykových, v nedávné době podstatně aktualizovaných, slovníků, nejstarší z nich v roce 1995, nejnovější v roce 2009. Dále byly využity ještě další zdroje, zejména slovníky a sbírky neologismů, které považujeme za důležitou součást našeho vzorku. Ve zvolených slovnících jsme vyhledávali 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 jsme se při rozhodování opírali o transparentní typologii, naše vlastní lingvistické znalosti a někdy dokonce i o lingvistickou intuici.

Shromážděný materiál je roztříděn 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 specifičtější 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, adjektiva z abstraktních nebo dějových substantiv a substantiva z jiných, morfologicky složitějších substantiv), je v této práci rozšířena o další tři typy: zpětné derivace vzniklé odtržením předpony, flektivní zpětné derivace a adjektiva z konatelských substantiv.

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 VII a Typ VIII. V odborné literatuře jsou běžně zmiňovány jako příklady zpětného tvoření (např. Bauer, 1983, Katamba, 2006). Předpokládáme, že reprezentují dva specifické druhy tohoto slovotvorného 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 našem 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 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 považujeme ji za nový typ, a to z několika důvodů. Za prvé, pro první období byla nalezena jedna potenciální jednotka: adjektivum *paratroop*. Jako potenciální ji označujeme 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 V 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 v naší práci uznána jako samostatný typ zpětného tvoření a začleněna do naší typologie jako Typ IX. Zodpověděli jsme tak otázku položenou v závěru kapitoly 6.1.5.6, 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 redukovaných slov, který do našeho vzorku nezahrnujeme, přestože se v literatuře objevuje názor, že jde o druh zpětného tvoření. Katamba (2006) tak překvapivě klasifikuje hypokoristika (zvláště domácké 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 našeho 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 našeho 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 naší 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 slovotvorného procesu v rámci celého období 20. a začátku 21. století. Pokud jde o množství jednotek ve druhém období (po r. 1960), sledujeme klesající tendenci 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 dekády 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 mimořádně aktivní v produkci zpětně utvořených slov. Lze ji považovat ze 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 z 700). Musíme si však zároveň uvědomit, že původní vzorek zpětných derivací první poloviny 20. století shromážděný a popsaný Pennanenem obsahuje 225 slov, což je téměř stejný počet jako počet slov v našem vlastním vzorku reprezentujícím druhé období (229). Vysokého počtu (471) zpětných derivací pro první polovinu 20. století bylo dosaženo až díky našemu 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 náš 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 náš předpoklad, že kvantitativní hodnoty vzorků by měly být srovnávány až s větším odstupem. Z tohoto důvodu je pro účely našeho 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 našeho 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 předpokládaná 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 našem 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 slovotvorného 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 sufigovaná substantiva vyvolala v angličtině potřebu utvořit 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 (*jobhunt*, 1946, *teleprint*, 1971 a *skirt-chase*, 1981), a staly se tak součástí našeho vzorku. Jsou dobrým příkladem neustálého pohybu v jazyce. Pennanenova predikce potenciální existence těchto zpětných derivací byla založena na stejných principech jako náš vlastní výzkum neologismů v rámci této studie, navržení 60 hypotetických zpětně utvořených nových slov a následné 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 nich 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 hlavní cíl našeho 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 předchozí části jsme shrnuli hlavní výsledky našeho výzkumu. 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 jsme použili v této studii, například těch, které obsahují více odborné terminologie nebo jiné specializované slovníky (např. slangové nebo regionální), nebo akademické projekty týkající 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. Mohli bychom také pokračovat ve výzkumu prozkoumáním Britského národního korpusu 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.

APPENDIX I

New sample of back-formations from the 1st half of the 20th century: Types I – VIII (246 items)

The excerpted dictionaries – abbreviations used:

COD 9th Concise Oxford Dictionary 9th Edition COD 11th Concise Oxford Dictionary 11th Edition 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 11th CD Merriam Webster's Unabridged Dictionary MW'sUD Online Etymology Dictionary. Douglas Harper, Historian Online ED Oxford English Dictionary, 2nd edition, version, 4.0 OED4 Random House Webster's Unabridged Dictionary RHUD

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 11th 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 11th 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 11th CD: **1945**, tr. v. f. *dozer* n. (bulldozer), = bulldoze²; 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. escalate¹

MW's 11th 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. escalate²

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 11th 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 11th 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. back-formation 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 11th 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 11th 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. transduce¹

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. transduce²

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 11th 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 9th: tr. v. f. *abreaction* n.; psychoanalysis: to remove by abreaction (release of emotional tension achieved through recalling a repressed traumatic experience); MW's 11th CD: after **1912**

2. acculturate

MW's 11th 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 11th 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'sUD: 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'sUD: intr. v., probably back-formation f. *decompensation* n.; to undergo decompensation; MW's 11th CD: after **1903**

16. dedifferentiate

MW'sUD: 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., probably back-formation f. *ecphoria* n.; to evoke or revive (an emotion, a memory, or the like) by means of a stimulus; OED4: **1917**, Psychology

23. excvst

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 11th 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 11th CD: **1938**, intr. v. f. *Indian wrestling* (a noun phrase); to engage in Indian wrestling; D.com: Americanism

33. infantilize

MW's 11th 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. keepering 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., probably back-formation 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 11th 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 11th 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 11th CD: after 1909

53. politick

OED4: **1917**; MW's 11th 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. pyrolize

MW's 11th 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 11th CD: **1921**, tr. v. f. *revaluation* 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*, *absoption*; 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'sUD: 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 11th 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 11th 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 11th 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. cairned adj.; to mark with a cairn

3. cathect

MW's 11th 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. disproportionate

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 11th 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. nodulate¹

MW'sUD: tr. / intr. v.; probably back-formation 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. nodulate²

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 11th 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 back-formation from *scraggy*¹ 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 11th 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.; palæontology and zoology: an archosaurian reptile (living or extinct)

6. bicone

MW'sUD: n., probably back-formation 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., probably back-formation 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., probably back-formation f. *bizonal* adj.; *a bizonal area*; specifically: a zone governed or administered by two powers acting together; MW's 11th 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 11th CD: **c. 1909**, n. f. *dichromatic* adj., one affected with dichromatism; OED4: also dichromate, ophtalmology

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 11th 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. eustasv

OED4: **1946**, n., anglicized back-formation 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. gnotobiote

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*² adj.; australian slang; also lare; 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 11th 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 11th 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*³ 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 11th CD: **1946**, n. f. *prototrophic* adj.; a prototrophic individual; OED4: genetics

44. Rhaeto-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 11th 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 11th CD: **1929**, n. f. *trichromatic* adj.; a person with trichromatism; OED4: **1906**, ophthalmology

54. trivia

MW's 11th 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 11th 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., probably back-formation f. *wacky* adj.; slang (orig. U.S.), also whack: an eccentric or crazy person; a madman, a crackpot.

TYPE V: adjective from 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., probably back-formation 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*⁵ 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 11th CD: **1926 10. hyperthyroid**

MW's 11th 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 11th 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 11th 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 VI: 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 11th 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 11th 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 11th 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 11th 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., probably back-formation 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., probably back-formation 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 11th CD: **1925**, n., probably back-formation f. New Latin schizophrenia n.; one affected with schizophrenia (schizophrenia); OED4: psychology

20. schizothyme

MW's UD: n. probably back-formation from 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 11th CD: **1926**, n. f. *vulcanization* n.; a vulcanized product; OED4: **1942**; f. *vulcanize* (v.) after *filtrate*, *precipitate*, etc.

Type VII: 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 11th 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

MW's 11th CD: **1926**, tr. v. f. *disgruntle* v. (= to make ill-humoured or discontented) by subtracting the prefix *dis*-, to put in a good humour; OED4: *gruntled* 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 11th 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 11th 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 VIII: inflectional back-formations (4 items)

1. bicep

MW's 11th 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 11th CD: **1926**, sg. n. f. *gladiolus* n. (taken as a plural); a plant

3. kudo

MW's 11th 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 II

New sample of back-formations of the first half of the 20th century: Stylistic and regional connotations¹⁶: Types I – VIII (246 items)

TYPE I: verb from agent noun (37 items)

		i i i E i. vei d ii dili aş				
Item	unmarked	regional	colloq	slang	tech. term ¹⁷	Total
		connotation			/ learned word	·
adolesce	X					1
bartend		orig. and chiefly N. Amer.				1
bird-watch	X					1
bus		Americanism				1
cliff-hang		orig. U.S.				1
co-drive	X					1
compand					(telecommunications and electronics)	1
copyedit	X					1
curate	X					1
doze	X					1
double-head		orig. U.S.				1
escalate ¹	X					1
escalate ²	X					1
free-load		Americanism	X			2
knuckle-dust		Americanism		X		2
micronize		orig. U.S.				1
muck-rake		Ū.S.				1
overachieve					psychology	1
penny-pinch				X		1
pinhook		U.S. regional sl.		X		2
razor-slash	X					1
redbait		orig. U.S.				1
rotavate	X					1
rototill		U.S. proprietary				1
second-guess		orig. and chiefly N.Amer.	Х			2
sedate					medicine	1
sidewind		orig. U.S.				1
skyscrape	X					1
spelunk	1	N. American sl.		X		2
squeg	1				electronics	1
switch-hit	1	U.S.		X	baseball	3
talent-spot	Х			1		1
transduce ¹	X			1		1
transduce ²				1	microbiology	1
underachieve					psychology	1
varitype	Х				1 3	1
zip	X					1
Total	15	15	2	5	7	44
			1			

Table 1: Classification of Type I according to the stylistic and regional connotations in the period of 1901-1960

1,

¹⁶ The indication of regional connotation has been transferred here in the same form as in various dictionaries, therefore it is sometimes different even in the cases of the same variety, e.g. "Americanism", or "U.S."

¹⁷ Where the name of the field is in parentheses, this means that the word was not literally labelled in the dictionary as belonging to that terminology, but from the quotations it is clear that the words is limited in use to the given sphere.

TYPE II: verb from action noun (79 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
abreact		Commotation			psychoanalysis	1
acculturate		chiefly U.S.				1
advect		, , , , , , , , , , , , , , , , , , , ,			meteorology, oceanography	1
appersonate					psychiatry	1
auto-suggest					psychology	1
blockbust		Americanism				1
brute	X					1
carboxylate					chemistry	1
chemisorb					chemistry	1
choreograph		orig. U.S.				1
chromatograph					chemistry	1
convect	Х					1
co-vary	Х					1
decarboxylate					chemistry	1
decompensate				1	learned	1
dedifferentiate				1	biology	1
defibrilate				†	medicine	1
demodulate				†	electricity	1
derivatize					chemistry	1
desorb					physical chemistry	1
destruct		Х			physical chemistry	1
ecphore		A			psychology	1
excyst					biology, medicine	1
excyst					geology	1
exflagellate				-	biology, zoology	1
					biology, zoology	
fragmentate fellate	X					1
	X					1
fluoridate	X				1: 1	1
gelate					biology	1
hyperventilate					physiology	1
ice-fish	X					1
Indian-wrestle		Americanism				1
infantilize	X					1
inscript	X					1
intercool					learned	1
interconvert					learned	1
introgress	X					1
introject					psychology	1
job-hunt			X			1
keeper	X					1
lenite					phonology	1
loud-hail	X					1
metalate					chemistry	1
mirate		U.S.	X	1		2
mutarotate					chemistry	1
notate	X					1
parcellate	x (rare)					1
pend					commerce	1
perserverate					psychology	1
phagocytose					biology	1
pinocytose					physiology	1
planograph					science	1
politick	X					1

polygonize				metallurgy	1
practice-teach	X				1
pyrolize				chemistry	1
racialize	X				1
reflate	X				1
repercus	X				1
revalorize	X				1
revaluate	X				1
scapegoat	X				1
seriate	X				1
show-jump	X				1
sorb				physical chemistry	1
spermatize				mycology (rare)	1
steam-distill				chemistry	1
subassemble	X				1
subincise		Australian			1
subvocalize				sciences	1
superinfect				medicine	1
superovulate				physiology	1
surveil	X				1
symbiose	X				1
telecommunicate	X				1
teleport	X				1
thrombose				pathology	1
transvaluate	X				1
upkeep	X				1
Total	31	7	2	40	80

Table 2: Classification of type II according to the stylistic and regional connotations in the period of 1901-1960

TYPE III: verb from adjective (21 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/ learned word	
bonderize					engineering	1
cairn	X					1
cathect					psychoanalysis	1
computerize	X					1
decongest					pharmacology	1
disproportionate					chemistry	1
fetishize	X					1
floss		chiefly U.S.		X		2
french fry	X	Americanism				2
gangle				X		1
nodulate ¹					botany	1
nodulate ²					botany	1
norm					mathematics	1
quantitate	X					1
rort				X		1
scrag				X		1
sozzle				X		1
stuff ⁴		U.K.		X		2
stupend	X					1
unweight	X					1
zonk		Americanism		X		2
Total	7	4	0	7	7	25

Table 3: Classification of type III according to the stylistic and regional connotations in the period of 1901-1960

TYPE IV: noun from adjective (56 items)

adiabat	_	connotation			/ learned word	
					physics	1
allochton					geology	1
apochromat					optics	1
apomict					biology	1
archosaur					palæontology and zoology	1
bicone	Х				paraconterogy and zooregy	1
biface	Α				archeology	1
bizone	Х				archeology	1
clast						1
crystalloblast	X					
-	X				1	1
cryptozoa					zoology	1
dichromat					ophtalmology	1
didact	X					1
dill		Austr. /NZ		X		2
dip				X		1
epistasis					genetics	1
eustasy					physical geography	1
exurb	X	orig. U.S.				2
ferromagnet					physics	1
frivol			X			1
funk					music	1
gnotobiote					biology	1
homæostat	Х					1
hypostasis					genetics	1
interfluve	Х				geneties	1
intersex	74				biology	1
lair		Austr.		Х	biology	2
lysogen		Austr.		Λ	microbiology	1
meroplankton					biology	1
					biology	1
mesotroph						1
metatroph					biology	
narcolept	X				. 1	1
orbicule			1		petrology	1
osmophore					chemistry	1
parafovea					anatomy	1
paramagnet					natural sciences	1
pluton					geology	1
polychromasia					medicine	1
polygene					genetics	1
polytrope					physics and astronomy	1
polyunsaturate					chemistry	1
priss		U.S.	X			2
prototroph			İ		genetics	1
Rhæto-Roman	Х					1
rort		Australian	1	Х		2
sardony	Х				<u>†</u>	1
slant-eye	Α	orig. U.S.	1	Х	1	2
sleaze	1	0115. 0.5.	1			1
	+		.,	X	1	
smarm	+	+	X			1
spasmogen			1		pharmacology	1
sternutator			1		chemical warfare	1
syntone			1		psychiatry	1
trichromat	1			l	ophthalmology	1

ultramicroscope	X					1
wack		orig. U.S.		X		2
Total	13	7	3	7	33	63

Table 4: Classification of type IV according to the stylistic and regional connotations in the period of 1901-1960

TYPE V: adjective from noun (17 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
aerobatic	Х					1
argentaffin					histology	1
autoimmune					immunology	1
avionic	X					1
biometric	X					1
cloze					psychology	1
co-ordinate					chemistry	1
cybernetic	X					1
dermatoglyphic	X					1
hypoparathyroid					medicine	1
hyperthyroid					medicine	1
logistic	X					1
paratroop	X					1
premune					immunology	1
superconductive					physics	1
surreal	X					1
vacuolating					natural sciences	1
Total	8	0	0	0	9	17

Table 5: Classification of type V according to the stylistic and regional connotations in the period of 1901-1960

TYPE VI: noun from another noun which is believed to be its derivative (24 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/ learned word	
aerobat	X					1
agoraphobe	X					1
bloop					baseball	1
claustrophobe	Х					1
cryoscope	Х					1
deuteranope					ophthalmology	1
grievant	X					1
kine					linguistics	1
leg-pull	X					1
morph					phonology, biology	1
mythomane	X					1
plasmal					biochemistry	1
polymerizate					chemistry	1
protanope					ophthalmology	1
pseudoallele					genetics	1
radiochemist	X					1
retardate	X					1
scintiscan					medicine	1
schizophrene					psychology	1

schizothyme					psychology	1
strip-tease		orig. U.S.	X			2
tautomer					chemistry	1
taxon					sciences (learned w.)	1
vulcanizate	X					1
Total	10	1	1	0	13	25

Table 6: Classification of type VI according to the stylistic and regional connotations in the period of 1901-1960

Type VII: prefix back-formations (8 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/ learned word	
clitic					grammar	1
dentulous	X					1
ept	X					1
gruntle	X					1
lapsarian					theology	1
opsin					biochemistry	1
sorb					physical chemistry	1
sorption					physical chemistry	1
Total	3	0	0	0	5	8

Table 7: Classification of Type VII according to the stylistic and regional connotations in the period of 1901-1960

Type VIII: inflectional back-formations (4 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
bicep	X					1
gladiola	X					1
kudo			X	X		2
sciapod	X					1
Total	3	0	1	1	0	5

Table 8: Classification according to the stylistic and regional connotations in the period of 1901-1960

Appendix III

A new sample of back-formations from the second half of the 20th and the beginning of the 21st century (after 1961): Types I – IX (229 items)

The excerpted dictionaries – abbreviations used:

Concise Oxford Dictionary 9th Edition	COD 9 th
Concise Oxford Dictionary 11th Edition	COD 11 th
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 11 th Collegiate Dictionary	MW's 11 th CD
Merriam Webster's Unabridged Dictionary	MW'sUD
Merriam Webster's Online	MW's.com
Online Etymology Dictionary. Douglas Harper, Historian	Online ED
Oxford English Dictionary, 2 nd edition, version, 4.0	OED4
Random House Webster's Unabridged Dictionary	RHUD
The Longman Register of New Words (Ayto 1990)	Ayto

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. adenvlate

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 form the result to the start); to perform back-calculation

8. back-talk

OED4: **1962**, tr. / intr. v., probably back-formation 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

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 11th: 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. divizionalize

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. electrophorese

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 20th 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 extraposable

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. immunosupress

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 renumeration 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. lavback

OED4: 1972, intr. v. f. laybacking n.; mountaineering: to climb a crack by means of a layback

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: back-formation 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 back-formation 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. sericitization 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. *swidenning* 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. tumesce

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. vuppify

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. skeeve¹

OED4: 1986, tr. v. f. skeevy adj.; U.S. slang: to disgust (someone), to repel; to make uncomfortable

14. skeeve²

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**, noun 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. *ditzy* 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. adj. piscivorous, 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*² 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**, noun f. *stroppy* 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: adjective from 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 VI: 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. n. homophobia (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 VII: 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. oxic

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., probably from *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 VIII: inflectional back-formations (2 items)

1. gigaflop

OED4: **1976**, n. f. *gigaflops* n. (f. giga- + acronym f. **fl**oating-point **o**perations **p**er **s**econd), -*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. **fl**oating-point **o**perations **per** 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

Type IX: adjective from agent noun

a. 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

7 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).

APPENDIX IV

New sample of back-formations from the second half of the 20th and the beginning of the 21^{st} century (after 1961): Types I – IX (229 items)

Stylistic and regional connotation¹⁸

TYPE I: verb from agent / instrument noun (31 items)

Item	unmarked	regional	colloquial	slang	technical term /	Total
		connotation			learned word	
ass-lick				X		1
blow-dry	X					1
buff					computer technology	1
comede			x (jocular)			1
daysail	X					1
deal	X					1
front-load		U.S.				1
helicopt	Х					1
hot-dog				X		1
incent	х	orig. and chiefly N. Amer.				2
Jackroll		South African		Х		2
lase					(natural sciences and technology)	1
lime		West Indies			<i>C3</i> ,	1
mase					(natural sciences and technology)	1
mind-blow				Х	237	1
overachieve					psychology	1
play-make		chiefly U.S.		X	l j Cj	2
roller-coast	Х	j				1
shake-dance				Х		1
skirt-chase				X		1
strike-break	X					1
supply-teach	Х					1
Tase	Х	orig. U.S.				2
teleprint	X					1
topline	X		_			1
train-spot	X					1
trend-set	X					1
turbo-charge					engineering	1
vocode					acoustics	1
volumize	X					1
winsurf	X	orig. U.S.				2
Total	15	7	1	7	6	36

Table 1: Classification of Type I according to the stylistic and regional connotations in the period after 1961

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¹⁸ The indication of regional connotation has been transferred here in the same form as in various dictionaries, therefore it is sometimes different even in the cases of the same variety, e.g. "Americanism", or "U.S."

TYPE II: verb from action noun (126 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
access	х				(computing)	2
accreditate	X					1
adenylate					biochemistry	1
age-date					geology	1
alluviate					(sciences)	1
ass-kiss				vulgar		1
back-calculate	X					1
back-talk		chiefly U.S.	X			2
batch-process					computing	1
bibliograph	X					1
biomagnify					(natural Sciences)	1
blast-freeze	X					1
break-dance		orig. U.S.				1
carjack	X					1
computer-generate					computing	1
concord	Х					1
contracept	Х					1
cross-dress	X					1
cybernate	X					1
decondense					cytology	1
deconstruct					philosophy, literary theory	1
decriminalize	X					1
demerge	X					1
derecognize					politics	1
deregulate	X					1
direct-dial					telephony	1
disinform	X					1
divizionalize	X					1
downwell	X					1
drop-ship	X					1
drownproof	X					1
electrophorese					chemistry	1
enculturate	X					1
endocytose					physiology	1
eutrophicate					ecology	1
evapotranspire					geography	1
event					equestrianism	1
exfiltrate					military	1
exocytose					physiology	1
extrapose					grammar	1
featherbed	X					1
fine-tune	X	orig. U.S.				2
finger-pick					music	1
Finlandize					(politics)	1
fly-tip	X					1
forthold	Х		ļ	ļ		1
frequency-modulate			ļ	ļ	electricity	1
gay-bash		orig. and chiefly U.S.		X		2
gentrify	X	·				1
grice			Х			1
grit-blast	X					1
hand-hold	X					1

hydrofracture	holograph				physisc	1
hydrofracture						
Immunosuppress		x			Chemistry	
Intergroup		71			immunohiology	
Interline		x			minuncereregy	
iaw-bone						
job-share			US	x		
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surf-cast x 1						
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switch-sell	X					1
tail-walk	X					1
tectonize					geology	1
telemarket		orig. U.S.				1
telephone-tap						1
teletransport					physics and science fiction	1
touch-dance		orig. U.S.				1
touch-type	X					1
trickle-irrigate					agriculture	1
tumesce	X					1
upvalue	X					1
valet-park		N. American				1
vinify	X					1
wedel					skiing	1
word-process			•		computing	1
yuppify		orig. U.S.	X			2
Total	67	14	3	4	47	135

Table 2: Classification of type II according to the stylistic and regional connotations in the period after 1961

TYPE III: verb from adjective (17 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/ learned word	
anonymize	X					1
auto-destruct	X					1
biodegrade	X					1
Dolby					proprietary	1
gobsmack		U.K.		X		2
hard-wire					computing	1
phase-modulate					telecommunications	1
red-shift					(natural sciences)	1
ripsnort		orig. U.S.				1
self-finance	X					1
silicone					chemistry	1
silver-point	X					1
skeeve ¹		U.S.		X		2
skeeve ²		U.S.		X		2
steel-face	X					1
superconduct					physics	1
tenure		chiefly U.S.				1
Total	6	5	0	3	6	20

Table 3: Classification of Type III according to the stylistic and regional connotations in the period after 1961

TYPE IV: noun from adjective (24 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
alexithymia					psychology	1
anaphor	X					1
ditz				X		1
flash			X			1
glitz		orig. and chiefly N. American		Х		2
gork				X	medicine	2
grunge		U.S.		X		2
methanogen					biology	1
paramedic	X					1
piscivore	X					1
pretectum					anatomy	1
psychedelia	X					1
raunch		orig. U.S.	X			2
scuzz		N. American	X			2
shonk		Australian		X		2
skeeve		U.S.		X		2
somatotroph					physiology	1
strop		British	X			2
supramolecule	X					1
synesthete					(psychology)	1
tack			X			1
tight-ass		orig. and chiefly U.S.	X			2
transgene		_			biology	1
un-hero	X					1
Total	6	8	6	6	7	33

Table 4: Classification of type IV according to the stylistic and regional connotations in the period after 1961

TYPE V: adjective from noun (6 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation			/ learned word	
capitated	X					1
complicit	X					1
desertified	X					1
fluidic	X					1
genethic	X					1
intertextual					literary theory	1
Total	5	0	0	0	1	6

Table 5: Classification of type V according to the stylistic and regional connotations in the period after 1961

Type VI: noun from another noun which is believed to be its derivative (12 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
cineradiograph	Х					1
cladist					taxonomy	1
computer-phobe	X					1
eco-label	X					1
fact-find	X					1
grantsman	X	Americanism				2
homophobe	X					1
hyponym					linguistics	1
idiotype					immunology	1
intertext					literary theory	1
shrink-wrap	X					1
trunk			X			1
Total	7	1	1	0	4	13

Table 6: Classification of type VI according to the stylistic and regional connotations in the period after 1961

Type VII: prefix back-formations (8 items)

Item	unmarked	regional	colloq	slang	technical term /	Total
		connotation			learned word	
flappable	X					1
concerting			(jocular)			1
ilch		Americanism		X		2
oxic	X					1
patriate		Canadian			legislation	2
pheresis					medicine	1
plore	X					1
urb			X			1
Total	3	2	2	1	2	10

Table 7: Classification of Type VII according to the stylistic and regional connotations in the period after 1961

Type VIII: inflectional back-formations (2 items)

Item	unmarked	regional connotation	colloq	slang	technical term / learned word	Total
gigaflop					computing	1
megaflop					computing	1
Total	0	0	0	0	2	2

Table 8: Classification of Type VIII according to the stylistic and regional connotations in the period after 1961

Type IX: adjective from agent noun (3 items)

Item	unmarked	regional	colloq	slang	technical term	Total
		connotation		_	/learned word	
carburetted					chemistry	1
do-good		Americanism	disparaging			2
teenybop			X			1
	0	1	2	0	1	4

Table 9: Classification of Type IX according to the stylistic and regional connotations in the period after 1961

APPENDIX V

Alphabetical list of back-formations from the first half of the 20th century - Pennanen's sample (225 items)

1. admirate 2. aerodyne 3. air-condition 4. air-evacuate 5. airmark 6. air-ship 7. androgen 8. ank apple-polish 10. auth 11. autolyse 12. automate 13. aviate 14. avigate 15. baby-sit 16. baby-snatch 17. back-fire 18. back-form 19. back-scratch 20. back-seat-drive 21. back-slap 22. bargain-hunt 23. bar-keep 24. beach-comb 25. belly-land 26. benevol 27. best-sell 28. blizz 29. bludge 30. body-snatch 31. book-keep 32. bootleg 33. bottle-feed 34. bottle-wash 35. brain-wash 36. breast-feed 37. brill 38. cabinet-make 39. cake-eat 40. carol-sing 41. cavitate 42. chain-react 43. chain-smoke 44. chauf 45. cheer-lead 46. chiropract 47. Christmas-shop 48. city-edit 49. coit 50. congest 51. copy-read 52. counter-jump

53. cow-punch

54. crash-land

55. crise

56. cross-refer 57. custom-make 58 dish-wash 59. dive-bomb 60. elocute 61 emote 62. face-lift 63. fact-find 64. fascise 65. fellow-travel 66. fire-watch 67. flag-wag 68. flight-deliver 69. game-keep 70. garrul 71. gate-crash 72. ghost-write 73. gift-wrap 74. glam 75. glide-bomb 76. gold-dig 77. google 78. gramp 79. group-think 80. guest-conduct 81. haemolyse 82. half-choke 83. half-starve 84. hay-make 85. hedge-hop 86. high-brow 87. high-jack 88. hitch-hike 89. hitle 90. hoke 91. home-deliver 92. home-keep 93. house-break 94. house-clean 95. housepaint 96. husband-hunt 97. inconvene 98. involute 99. island-hop 100.jank 101.jet-propel 102.jum-shoot 103.junk 104.kibitz

111.lip-read 112.loan-translate 113.lorry-hop 114.lyse 115.maffick 116.map-read 117.mass-produce 118.metronym 119.mixbathe 120.mountain-climb 121.mug 122.mush-fake 123.name-drop 124.night-fly 125.night-herd 126.night-walk 127.non-intervene 128.obedience-train 129.outmode 130.panhandle 131.pattern-bomb 132.peeve (v.) 133.peeve (n.) 134.penure 135.phon 136.pinch-hit 137.playwrite 138.plum(b) 139.poetast 140.pot-hunt 141.pot-shoot 142.pre-fabricate 143.pressure-cook 144.price-fix 145.prize-fight 146.prognose 147.proof-read 148.propaganda 149.psychoanalyse 150.quisle 151.rabble-rouse 152.radiolocate 153.reluct 154.reparate 155.repug 156.retice 157.reune 158.rice 159.rough-land 160.sardine-pack 161.schlent 162.school-teach 163.self-determine

164.self-feed

165.self-hypnotize

105.kick-start

106.lab-examine

107.lead-poison

108.lech

109.liaise

110.libel-sue

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.televise 204.telephotograph 205.tenant-farm 206.town-plan 207.trench-dig

208.trial-subscribe 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 VI

Alphabetical list of back-formations from the 20th and the beginning of 21st century – new sample (475 items)

1. abreact 57. chemisorb 2. access 58. choreograph accreditate 59. chromatograph 4. acculturate 60. cineradiography 61. cladist 5. adenylate 6. adiabat 62. clast 63. claustrophobe 7. adolesce 8. advect 64. cliff-hang 65. clitic 9. aerobat 10. aerobatic 66. cloze 11. age-date 67. co-drive 12. agoraphobe 68. comede 13. alexithymia 69. compand 14. allochton 70. complicit 15. alluviate 71. computer-generate 16. anaphor 72. computerize 17. anonymize 73. computer-phobe 18. apochromat 74. concerting 19. apomict 75. concord 20. appersonate 76. contracept 21. archosaur 77. convect 22. argentaffin 78. co-ordinate 23. ass-kiss 79. copyedit 24. ass-lick 80. co-vary 25. auto-destruct 81. cross-dress 26. autoimmune 82. cryoscope 83. cryptozoa 27. auto-suggest 28. avionic 84. crystalloblast 29. back-calculate 85. curate 30. back-talk 86. cybernate 31. bartend 87. cybernetic 32. batch-process 88. daysail 33. bibliograph 89. deal 90. decarboxylate 34. bicep 35. bicone 91. decompensate 36. biface 92. decondense 37. biodegrade 93. decongest 38. biomagnify 94. deconstruct 39. biometric 95. decriminalize 40. bird-watch 96. dedifferentiate 41. bizone 97. defibrillate 42. blast-freeze 98. demerge 43. blockbust 99. demodulate 44. bloop 100.dentulous 45. blow-dry 101.derecognize 46. bonderize 102.deregulate 47. break-dance 103.derivatize 48. brute 104.dermatoglyphic 49. buff 105.desertified 50. bus 106.desinform 51. cairn 107.desorb 52. capitated 108.destruct

53. carboxylate

54. carburetted

55. carjack

56. cathect

113.dip 114.direct-dial 115.disinform 116.disproportionate 117.ditz 118. divizionalize 119.do-good 120.Dolby 121.double-head 122.downwell 123.doze 124.drop-ship 125.drownproof 126.eco-label 127.ecphore 128.electrophorese 129.enculturate 130.endocytose 131.epistasis 132.ept 133.escalate¹ 134.escalate² 135.eustasy 136.eutrophicate 137. evapotranspire 138.event 139.excyst 140.exfiltrate 141.exflagellate 142.exocytose 143.exsolve 144.extrapose 145.exurb 146 fact-find 147.featherbed 148.fellate 149. ferromagnet 150. fetishize 151.fine-tune 152. finger-pick 153.Finlandize 154.flappable 155.flash 156.floss 157.fluidic 158.fluoridate 159.fly-tip 160.forthold 161.fragmentate 162.freeload 163. french fry 164. frequency-modulate 165.frivol 166.front-load

167.funk

168.gangle

109.deuteranope

110.dichromat

111.didact

112.dill

169.gay-bash 229.lase 289.pheresis 230.layback 290.photoduplicate 170.gelate 171.genethic 231.leg-pull 291.physisorb 172.gentrify 232.lenite 292.pinhook 173.gigaflop 233.lime 293.pinocytose 174.gladiola 294.piscivore 234.loco-spot 175.glitz 235.logistic 295.planate 176.gnotobiote 236.loud-hail 296.planograph 177.gobsmack 237.lysogen 297.plasmal 178.gork 238.mase 298.play-make 179.grantsman 239.mediocritize 299.plea-bargain 180.grice 240.megaflop 300.plore 181.grievant 241.meroplankton 301.pluton 182.grit-blast 242.mesotroph 302.pole 183.grunge 243.metalate 303.politick 184. gruntle 244.metallide 304.polychromasia 185.hand-hold 305.polygene 245.metatroph 186.hard-wire 246.methanate 306.polygonize 187.helicopt 247.methanogen 307.polymerizate 248 metricate 308.polytrope 188.holograph 189.homæostat 249.microcode 309.polyunsaturate 190.homophobe 250.microinject 310.pot-train 191.hot-dog 251.micromanage 311.practice-teach 192.hydroborate 312.predate 252.micronize 193.hydrofracture 253.micropropagate 313.premune 194.hyperthyroid 254.micropublish 314.pretectum 195.hyperventilate 255.mind-blow 315.priss 196.hyponym 256.mirate 316.proact 197.hypoparathyroid 257.mode-lock 317.protanope 198.hypostasis 258.morph 318.prototroph 319.pseudoallele 199.ice-fish 259.muck-rake 200.idiotype 260.mutarotate 320.psychedelia 201.ilch 261.mythomane 321.pyrolize 202.immunosuppress 262.narcolept 322.quantitate 203.incent 263.nitpick 323.queue-jump 264.nodulate¹ 204. Indian-wrestle 324.racialize 265.nodulate² 205.infantilize 325.rack-job 206.inscript 266.norm 326.radiochemist 207.interconvert 267.notate 327.rate-cap 328.raunch 208.intercool 268.one-hand 209.interfluve 269.one-up 329.razor-slash 210.intergroup 270.opsin 330.reconfigure 211.interline 271.orbicule 331.redbait 272.osmophore 212.intersex 332.red-cook 213.intertext 273.ovate 333.redefect 214.intertextual 274.overachieve 334.red-shift 215.introgress 275.oxic 335.reflate 216.introject 276.paddock-graze 336.remediate 217.Jackroll 277.panick-buy 337.repercus 218.jaw-bone 278.parafovea 338.respirate 219.job-hunt 279.paramagnet 339 retardate 280.paramedic 220.job-share 340.revalorize 221.keeper 281.paratroop 341 revaluate 222.kerb-crawl 282.parcellate 342.Rhæto-Roman 283.patriate 223.kine 343.ripsnort 284.pend 344.role-take 224.kite-flv 225.knuckle-dust 285.penny-pinch 345.roller-coast 226.kudo 286.perserverate 346.rort *n*. 227.lair 287.phagocytose 347.rort *v*. 288.phase-modulate 228.lapsarian 348.rotavate, rotovate 349.rototill 350.safekeep 351.sardony 352.scapegoat 353.schizophrene 354.schizothyme 355.sciapod 356.scintiscan 357.scrag 358.scuzz 359.second-guess 360.sedate 361.self-destruct 362.self-finance 363.seriate 364.sericitize 365.shadow-cast 366.shake-dance 367.shonk 368.show-jump 369.shrink-wrap 370 sidewind 371.silicone 372.silver-point 373.skateboard 374.skeeve *n*. $375.\text{skeeve}^1 v.$ $376.\text{skeeve}^2 v.$ 377.skirt-chase 378.skyscrape 379.slant-eye 380.sleaze 381.smarm 382.snowboard 383.somatotroph 384.sonolyse 385.sorb (Type II) 386.sorb (Type VII) 387.sorption 388.soul-search 389.sozzle 390.spasmogen

391.spear-fish

392.speciate 393.spelunk 394.spermatize 395.squeg 396.steam-distill 397.steel-face 398.sternutator 399.strike-break 400.strip-tease 401.strop 402.stuff 403.stupend 404.subassemble 405.subincise 406.subvocalize 407.sulphonylate 408.superconduct 409.superconductive 410.superinfect 411.superovulate 412.supply-teach 413.supramolecule 414.surf-cast 415.surreal 416.surveil 417.swiden 418.switch-hit 419.switch-sell 420.symbiose 421.synesthete 422.syntone 423.tack 424.tail-walk 425.talent-spot 426. Tase 427.tautomer 428.taxon 429.tectonize 430.teenybop 431.telecommunicate 432.telemarket 433.telephone-tap 434.teleport

435.teleprint 436.teletransport 437.tenure 438.thrombose 439.tight-ass 440.topline 441.touch-dance 442.touch-type 443.train-spot 444.transduce¹ 445.transduce² 446.transgene 447.transvaluate 448.trend-set 449.trichromat 450.trickle-irrigate 451.trivia 452.trunk 453.tumesce 454.turbo-charge 455.ultramicroscope 456 underchieve 457.un-hero 458.unweight 459.upkeep 460.upvalue 461.urb 462.vacuolating 463.valet-park 464. varitype 465.vinify 466.vocode 467.volumize 468.vulcanizate 469.wack 470.wedel 471.winsurf 472.word-process 473.yuppify 474.zip

475.zonk

APPENDIX VII

Alphabetical list of back-formations from the 20th and the beginning of 21st century

(Pennanen's sample and the new samples integrated - 700 items)

abreact access 3. accreditate 4. acculturate 5. adenylate 6. adiabat 7. admirate 8. adolesce advect 10. aerobat 11. aerobatic 12. aerodyne 13. age-date 14. agoraphobe 15. air-condition 16. air-evacuate 17. airmark 18. air-ship 19. alexithymia 20. allochton 21. alluviate 22. anaphor 23. androgen 24. ank 25. anonymize 26. apochromat 27. apomict 28. appersonate 29. apple-polish 30. archosaur 31. argentaffin 32. ass-kiss 33. ass-lick 34. auth 35. auto-destruct 36. autoimmune 37. autolyse 38. automate 39. auto-suggest 40. aviate 41. avigate 42. avionic 43. baby-sit 44. baby-snatch 45. back-calculate 46. back-fire 47. back-form 48. back-scratch 49. back-seat-drive 50. back-slap 51. back-talk 52. bargain-hunt

53. bar-keep

55. batch-process

56. beach-comb

54. bartend

57. belly-land 58. benevol 59. best-sell 60. bibliograph 61. bicep 62. bicone 63. biface 64. biodegrade 65. biomagnify 66. biometric 67. bird-watch 68. bizone 69. blast-freeze 70. blitz 71. blockbust 72. bloop 73. blow-dry 74. bludge 75. body-snatch 76. bonderize 77. book-keep 78. bootleg 79. bottle-feed 80. bottle-wash 81. brain-wash 82. break-dance 83. breast-feed 84. brill 85. brute 86. buff 87. bus 88. cabinet-make 89. cairn 90. cake-eat 91. capitated 92. carboxylate 93. carburetted 94. carjack 95. carol-sing 96. cathect 97. cavitate 98. chain-react 99. chain-smoke 100.chauf 101.cheer-lead 102.chemisorb 103.chiropract 104.choreograph 105. Christmas-shop 106.chromatograph 107.cineradiography 108.city-edit 109.cladist

114.cloze 115.co-drive 116 coit 117.comede 118.compand 119.complicit 120.computer-generate 121.computerize 122.computer-phobe 123.concerting 124.concord 125.congest 126.contracept 127.convect 128.co-ordinate 129.copyedit 130.copy-read 131.counter-jump 132.co-vary 133.cow-punch 134.crash-land 135.crise 136.cross-dress 137.cross-refer 138.cryoscope 139.cryptozoa 140.crystalloblast 141.curate 142.custom-make 143.cvbernate 144.cybernetic 145.daysail 146.deal 147.decarboxylate 148.decompensate 149.decondense 150.decongest 151.deconstruct 152.decriminalize 153.dedifferentiate 154.defibrillate 155.demerge 156.demodulate 157.dentulous 158.derecognize 159.deregulate

160.derivatize

162.desertified

163.desinform

164.desorb

168.didact

165.destruct

166.deuteranope

167.dichromat

161.dermatoglyphic

111.claustrophobe

112.cliff-hang

110.clast

169.dill 229. fragmentate 289.hydrofracture 230.freeload 290.hyperthyroid 170.dip 171.direct-dial 231. french fry 291.hyperventilate 172.dish-wash 232. frequency-modulate 292.hyponym 173.disinform 233.frivol 293.hypoparathyroid 234. front-load 294.hypostasis 174. disproportionate 295.ice-fish 175.ditz 235.funk 176.dive-bomb 236.game-keep 296.idiotype 177. divizionalize 237.gangle 297.ilch 178.do-good 238.garrul 298.immunosuppress 179.Dolby 239.gate-crash 299.incent 180.double-head 240.gay-bash 300.inconvene 181.downwell 241.gelate 301.Indian-wrestle 242.genethic 182.doze 302.infantilize 183.drop-ship 243.gentrify 303.inscript 184.drownproof 244.ghost-write 304.interconvert 185.eco-label 245.gift-wrap 305.intercool 186.ecphore 246.gigaflop 306.interfluve 187.electrophorese 247.gladiola 307.intergroup 188.elocute 248.glam 308 interline 189 emote 249.glide-bomb 309.intersex 190 enculturate 250.glitz 310 intertext 251.gnotobiote 191.endocytose 311.intertextual 252.gobsmack 192.epistasis 312.introgress 193.ept 253.gold-dig 313.introject 194.escalate1 254.google 314.involute 195.escalate² 255.gork 315.island-hop 196.eustasy 256.gramp 316.Jackroll 197.eutrophicate 257.grantsman 317.jank 198.evapotranspire 258.grice 318.jaw-bone 199.event³ 259.grievant 319.jet-propel 200.excyst 260.grit-blast 320.job-hunt 201.exfiltrate 261.group-think 321.job-share 202.exflagellate 262.grunge 322.jum-shoot 263.gruntle 203.exocytose 323.junk 204.exsolve 264.guest-conduct 324.keeper 325.kerb-crawl 205.extrapose 265.haemolyse 206.exurb 266.half-choke 326.kibitz 207. face-lift 267.half-starve 327.kick-start 328.kine 208. fact-find n. 268.hand-hold 209. fact-find v. 269.hard-wire 329.kite-fly 210.fascise 270.hay-make 330.knuckle-dust 211.featherbed 271.hedge-hop 331.kudo 272.helicopt 212.fellate 332.lab-examine 213. fellow-travel 273.high-brow 333.lair 274.high-jack 334.lapsarian 214.ferromagnet 215.fetishize 275.hitch-hike 335.lase 216.fine-tune 276.hitle 336.layback 217. finger-pick 277.hoke 337.lead-poison 218.Finlandize 278.holograph 338.lech 219 fire-watch 279.homæostat 339.leg-pull 340.lenite 220.flag-wag 280.home-deliver 221.flappable 281.home-keep 341 liaise 222.flash 282.homophobe 342.libel-sue 223.flight-deliver 283.hot-dog 343.lime 224.floss 284.house-break 344.lip-read 225.fluidic 285.house-clean 345.loan-translate 226.fluoridate 286.housepaint 346.loco-spot 227.fly-tip 287.husband-hunt 347.logistic 228. forthold 288.hydroborate 348.lorry-hop

349.loud-hail 409.paramagnet 469.psychoanalyse 410.paramedic 470.pyrolize 350.lyse 351.lysogen 411.paratroop 471.quantitate 352.maffick 412.parcellate 472.queue-jump 353.map-read 413.patriate 473.quisle 474.rabble-rouse 414.pattern-bomb 354.mase 355.mass-produce 415.peeve (n.) 475.racialize 356.mediocritize 416.peeve (v.) 476.rack-job 417.pend 477.radiochemist 357.megaflop 358.meroplankton 418.penny-pinch 478.radiolocate 359.mesotroph 419.penure 479.rate-cap 360.metalate 420.perserverate 480.raunch 361.metallide 421.phagocytose 481.razor-slash 362.metatroph 422.phase-modulate 482.reconfigure 363.methanate 423.pheresis 483.redbait 364.methanogen 424.phon 484.red-cook 425.photoduplicate 365.metricate 485.redefect 366.metronym 426.physisorb 486.red-shift 367.microcode 427.pinch-hit 487.reflate 428.pinhook 368.microinject 488 reluct 369.micromanage 429.pinocytose 489.remediate 370.micronize 430.piscivore 490.reparate 431.planate² 371.micropropagate 491.repercus 432.planograph 372.micropublish 492.repug 373.mind-blow 433.plasmal 493.respirate 374.mirate 434.play-make 494.retardate 435.playwrite 375.mixbathe 495.retice 376.mode-lock 436.plea-bargain 496.reune 437.plore 497.revalorize 377.morph 378.mountain-climb 438.plum(b) 498.revaluate 379.muck-rake 439.pluton 499. Rhæto-Roman 380.mug 440.poetast 500.rice 381.mush-fake 441.pole 501.ripsnort 442.politick 502.role-take 382.mutarotate 383.mythomane 443.polychromasia 503.roller-coast 444.polygene 384.name-drop 504.rort n. 445.polygonize 385.narcolept 505.rort v. 386.night-fly 446.polymerizate 506.rotavate, rotovate 387.night-herd 447.polytrope 507.rototill 388.night-walk 448.polyunsaturated 508.rough-land 389.nitpick 449.pot-hunt 509.safekeep 390.nodulate1 450.pot-shoot 510.sardine-pack 391.nodulate² 451.pot-train 511.sardony 392.non-intervene 452.practice-teach 512.scapegoat 393.norm 453.predate 513.schizophrene 394.notate 454.pre-fabricate 514.schizothyme 395.obedience-train 455.premune 515.schlent 396.one-hand 456.pressure-cook 516.school-teach 397.one-up 457.pretectum 517.sciapod 398.opsin 458.price-fix 518.scintiscan 399.orbicule 459.priss 519.scrag 400.osmophore 460.prize-fight 520.scuzz 401.outmode 461.proact 521.second-guess 462.prognose 522.sedate 402.ovate 403.overachieve 463.proof-read 523.self-destruct 404.oxic 464.propaganda 524.self-determine 405.paddock-graze 465.protanope 525.self-feed 406.panhandle 466.prototroph 526.self-finance 407.panick-buy 467.pseudoallele 527.self-hypnotize 408.parafovea 468.psychedelia 528.self-ignite

	-0-	- 1 - 1·
529.seriate	587.stigmat	645.topline
530.sericitize	588.stinge	646.touch-dance
531.set-shoot	589.storm-toss	647.touch-type
532.shab	590.strap-hang	648.town-plan
533.shadow-box	591.stream-line	649.train-spot
534.shadow-cast	592.strike-break	650.transduce ¹
535.shake-dance	593.strip-tease	651.transduce ²
536.sharecrop	594.strop	652.transgene
537.shonk	595.student-teach 596.stuff	653.transvaluate
538.shop-walk		654.trench-dig 655.trend-set
539.shotgun-marry	597.stupend 598.subassemble	656.trial-subscribe
540.show-jump 541.shrink-wrap	599.subincise	657 trichromat
542.side-dress	600.subvocalize	658.trickle-irrigate
543.sidewind	601.sulphonylate	659.trig
544.sight-read	602.summer-board	660.trivia
545.silicone	603.sun-bathe	661.trouble-shoot
546.silver-point	604.superconduct	662 trunk
547.skateboard	605.superconductive	663 tumesce
548.skeeve <i>n</i> .	606.superinfect	664.turbo-charge
549.skeeve ¹ <i>v</i> .	607.superovulate	665.turbosupercharge
$\begin{array}{c} 550. \text{ skeeve}^2 v. \end{array}$	608.supply-teach	666.tute
551.skin-dive	609.supramolecule	667.two-time
552.skip-bomb	610.surf-bathe	668.type-cast
553.skirt-chase	611.surf-cast	669.ultramicroscope
554.skyscrape	612.surf-ride	670.underchieve
555.sky-write	613.surreal	671.un-hero
556.slant-eye	614.surveil	672.unweight
557.slave-drive	615.swiden	673.upkeep
558.sleaze	616.switch-hit	674.upvalue
559.sleep-walk	617.switch-sell	675.urb
560.smarm	618.symbiose	676.vacuolating
561.snoot	619.synesthete	677.vacuum-clean
562.snowboard	620.syntone	678.valet-park
563.soft-land	621.tack	679.varitype
564.somatotroph	622.tailor-make	680.verge
565.sonolyse	623.tail-walk	681.vinify
566.sorb (Type II)	624.talent-spot	682.vive
567.sorb (Type VII)	625.tape-record	683.vocode
568.sorption	626. Tase	684.volumize
569.soul-search	627.tautomer	685.vulcanizate
570.sound-condition	628.taxon	686.wack
571.soundproof	629.tax-pay	687.warb
572.sozzle	630.tectonize	688.watch-keep
573.spasmogen	631.teenybop	689.wedel
574.spear-fish	632.telecommunicate	690.whipper-snap
575.speciate	633.telemarket	691.windjam
576.speed-read	634.telepath	692.window-clean
577.spelunk	635.telephone-tap	693.window-dress
578.spermatize	636.telephotograph	694.window-shop
579.spike	637.teleport	695.winsurf
580.spinst	638.teleprint	696.wire-tap
581.squeg	639.teletransport	697.word-process
582.stag-head	640.televise	698.yuppify
583.steam-distill	641.tenant-farm	699.zip
584.steam-roll	642.tenure	700.zonk
585.steel-face	643.thrombose	
586.sternutator	644.tight-ass	

APPENDIX VIII: 1 Alphabetical list of unconfirmed backformations (8 items)

- 2 Alphabetical list of potential back-formations (60 items)
- 3 Alphabetical list of confirmed back-formations (25 items)

1 Alphabetical list of unconfirmed backformations

- 1. bilat
- 2. blush
- 3. cat
- 4. decaf

- dollarize
- eco-renovate
- gazunder
- sandsurf

2 Alphabetical list of potential back-formations

- *backyard 1.
- 2. *biodiverse
- 3. *bladder
- 4. *blat
- 5. *boy-toy
- 6. *casual
- 7. *cocoon
- *cold-fax
- 9. *collectomane
- 10. *comp
- 11. *conduce
- 12. *cross-owner
- 13. *cruciverbal
- 14. *customed
- 15. *daytime
- 16. *destatizate / destatisate
- 17. *disfluent / dysfluent
- 18. *Disneyfy
- 19. *dope 20. *downmarket
- 21. *eco-label
- 22. *expense
- 23. *fax-nap
- 24. *filo-nap 25. *flash-forward
- 26. *fuzzbust 27. *gas-flush
- 28. *girocrat
- 29. *goldfish
- 30. *Gorbymane

- 31. *green-label
- 32. *green-lane 33. *grockle
- 34. *infotain
- 35. *joy-fire
- 36. *lightweight
- 37. *man-train
- 38. *marketize
- 39. *monkey-wrench
- 40. *monoboard
- 41. *parapent(e)
- 42. *politrick n.
- 43. *Pont
- 44. *pre-lighten
- 45. *radiophobe
- 46. *scoopy
- 47. *slice-colour
- 48. *snowsurf
- 49. *spas
- 50. *step-parent 51. *stonepeck
- 52. *sweat
- 53. *tariffy
- 54. *tax
- 55. *upski
- 56. *videocrat
- 57. *videoswipe 58. *Vogue
- 59. *wallpeck
- 60. *water-walk

3 Alphabetical list of confirmed back-formations

- 1. biodiverse
- 2. blat
- 3. cold-fax
- 4. cross-own
- 5. cruciverbal
- 6. customed
- 7. disfluent / dysfluent
- 8. Disneyfy
- 9. downmarket
- 10. eco-label
- 11. gas-flush
- 12. girocrat
- 13. green-lane

- 14. infotain
- 15. marketize
- 16. monkey-wrench
- 17. parapent
- 18. politrick n.
- 19. pre-lighten
- 20. radiophobe
- 21. snowsurf
- 22. tariffy
- 23. videocrat
- 24. Vogue
- 25. water-walk

ABSTRACT

The subject of the present study is a description and analysis of English backformation in the 20th and the beginning of the 21st century. The work mainly focuses 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. Based on the analysis of the contemporary situation and on the results of the research of neologisms involved in the process of back-formation, prevailing tendencies for the nearest future have been drawn and possible subjects for further research have been suggested. Investigation of an overall sample of 768 back-formed items has resulted in the following conclusions: Productivity of back-formation remains on the same level as it was in the first half of the 20th century. The most productive process is formation of verbs from action nouns, which has grown significantly. Back-formation of verbs from agent nouns has decreased, formation of verbs from adjectives almost disappeared. Adjectives can be seen as a minor source of backformed nouns, probably decreasing in productivity. There is a growth in involvement of compounds in this process. The most frequent subtracted suffixes are -ing, -ion/-ation and -er, all of them being involved in the formation of verbs. Stylistically unmarked items prevail, but they are often limited in use. Prefix back-formations continue to be formed. Inflectional backformations seem to decline. The class of adjectives back-formed from agent nouns is a new type that might continue in occurrence. As far as expectations for the future are concerned, the predominance of back-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 formation of verbs from agent nouns: it seems to be decreasing, perhaps as a result of competition with action nouns. Suffix -ing is growing in frequency and will be probably more and more often involved in the process of backformation. Stylistically unmarked words will probably form the main volume of back-formed words, but technically and scientifically marked words have also potential in the given process. Compounds will probably become a more frequent source and so the result of backformation in English.

ABSTRAKT

Předmětem této studie je popis a analýza zpětného tvoření v angličtině ve 20. a na začátku 21. století. Práce se zaměřuje zejména na poslední etapu daného období a klade si za cíl určit nejtypičtější rysy tohoto slovotvorného procesu v současnosti. Na základě analýzy současné situace a výsledků výzkumu neologismů, které se účastní procesu zpětného tvoření, jsou také charakterizovány převažující tendence pro nejbližší budoucnost a dále navrženy možnosti dalšího zkoumání v této oblasti jazyka. Z výzkumu celkového vzorku 768 zpětně utvořených slov byly vyvozeny následující závěry: Nejproduktivnější proces zpětné derivace je tvoření sloves z dějových substantiv; ve srovnání se situací v první polovině 20. století lze hovořit o poměrně dramatickém nárůstu tohoto typu. 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. Nejfrekventovanější odtržené sufixy jsou -ing, -ion/-ation a -er, přičemž všechny jsou zapojeny do tvoření sloves. 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 tvoření sloves z dějových substantiv bude pravděpodobně trvat – jde o nejsnadněji fungující proces. Produktivita tvoření substantiva z adjektiv bude pravděpodobně mít dále klesající tendenci. Totéž platí pro tvoření sloves z konatelských substantiv: zdá se, že jeho produktivita klesá, zřejmě v důsledku konkurence se substantivy dějovými. 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. Složeniny budou pravděpodobně stále častějším zdrojem, a tedy i výsledkem zpětného tvoření v angličtině.