

Maja M. Žarković Mccray¹
University of East Sarajevo
Faculty of Philosophy Pale
Department of English

MORPHOLOGICAL PRODUCTIVITY OF ADJECTIVE-FORMING PREFIXES IN ENGLISH AT THE LEVEL OF WORD-FORMATION RULES

Abstract: This paper studies the morphological productivity of adjective-forming prefixes at the level of word-formation rules. The productivity at the aforementioned level is the union of the productivity at the level of word-formation types and morphological types. The aim of the paper is to offer pieces of information on the interaction of different concepts within different word-formation types together with the morphological aspect through different morphological types. We find 267 examples of adjectives and analyse 31 prefixes interacting with various simple or complex adjectives in the corpus comprised of news, literary, academic and TV registers. After analytic, descriptive and statistical methods, we conclude that they fall into 5 different conceptual categories, i.e., word-formation type clusters (Quality, Location, Quantity, Time and State). The majority of clusters show that the stem is determining the conceptual category while prefixes refine it. The highest productivity rates are recorded with such word-formation types. The only exceptions are Quantity and Time where the conceptual category depends on the prefixes and stems equally. The results from the morphological analyses show that most of the prefixes are inserting additional semantic pieces of information, usually recording the highest PR and not changing the conceptual category of the stem and appearing within one or multiple clusters, with exceptions for Quantity and Time.

Keywords: morphological productivity, word-formation type clusters, word-formation rules, word-formation types, morphological types, adjective-forming prefixes in English.

1. INTRODUCTION

The quantitative research of morphological productivity has been going through its most productive period, with the introduction of Baayen's formulas (1992, 1993) that relied considerably on all the existing definitions of morphological productivity: the focus being on the frequency of the output words (Rainer, 1987, as cited in: Bauer, 2004:p.25), the number of available bases (Lieber, 1981), the proportion of words actually used to the number of words potentially created by a particular process (Aronoff, 1976), the possibility of forming new words (Rainer, 1987, as cited in: Bauer, 2004:p.25), the probability of new forms occurring (Harris, 1951; Aronoff, 1983) and the number of new forms occurring in a specified period of time (Rainer, 1987, as cited in: Bauer, 2004:p.25). This affix-driven quantitative model with its clear terminology has become almost unavoidable in the contemporary research (Baayen, 1994; Baayen & Renouf, 1996; Baayen & Neijt, 1997; Plag, Dalton-Puffer & Baayen, 1999; Hay & Baayen, 2002; Hay & Baayen, 2003; Plag, 2003; Fernandez-Dominguez, Diaz-Negrillo & Štekauer, 2007; Žarković, 2017, 2019a, 2019b), but also recognised as completely unusable for any other word-formation-process, but affixation (Жарковић, 2017; Žarković, 2017; Žarković Mccray, 2022; Žarković Mccray & Kujundžić, 2022) and detached from human imagination, knowledge, experience, etc. (Štekauer, 2005a, 2005b). Having in mind that morphological productivity is seen as the property of human language, which allows language users to use their acquired linguistic knowledge to name something new when needed (Yule, 1996:p.22-23), we wanted our research on the morphological productivity of adjective-forming prefixes to be detached from Baayen's formula-driven analyses and based on the observations that word-formation is about naming acts and processes that are active and forming (Grzega, 2002). These observations can be found as the core of onomasiological theory to word-formation and morphological productivity.

1.1. Onomasiological theory

Onomasiological theory was marked by pioneering theories of word-formation by Miloš Dokulil (1962, as cited in: Štekauer, 2005a) and Ján Horecký (1983, 1989, as cited in: Štekauer, 2005a). While Dokulil was focused on the idea of onomasiological categories defining them as basic conceptual structures enabling the act of naming to happen, Ján Horecký made a highly significant step in the development of onomasiological theory of word-formation by his multi-level model

of word-formation, including an object of extra-linguistic reality, the pre-semantic (conceptual), semantic, and formal levels. His elaborate semantic level that he develops enlists semantic distinctive features, offers an analysis of their relations, and proposes their hierarchical organisation.

Being largely influenced by Dokulil's and Horecký's ideas, Pavol Štekauer establishes the form-meaning unity as the fundamental principle of his onomasiological model and goes to say:

‘Word-formation deals with productive and rule-governed patterns (word-formation types and rules, and morphological types) used to generate motivated naming units in response to the specific naming needs of a particular speech community by making use of word-formation bases of bilateral naming units and affixes stored in the Lexical Component.’ (2005a:p.212)

He emphasises the importance of the active role of language users in the act of naming to bypass an affix-driven system of rules which he sees as impersonal and detached from naming units and language users. The act of naming cannot be seen as detached from human knowledge, experience, imagination, etc. (Štekauer, 2005a, 2005b). The assumption is that each act of naming is first lexically scanned by the speech community, which predetermines all the ensuing steps within the act of naming.

1.2. Onomasiology and Morphological Productivity

The onomasiological theory states that all naming units are formed by productive word-formation and morphological types/rules (Štekauer, 2005a, 2005b; Štekauer *et al.*, 2005). Each act of naming starts at the conceptual level where the object to be named is identified within the conceptual category. When the concept of the object is identified, the naming process identifies semantic and morphemic components in the naming structure of the resulting word. Different naming structures can be analysed from different angles leading to different productivity rates (PR). The onomasiological approach distinguishes four different levels of naming structures, i.e. four levels of productivity:

1. the productivity at the level of Onomasiological Types
2. the productivity at the level of Word-Formation Types
3. the productivity at the level of Morphological Types
4. the productivity at the level of Word-Formation Rules

The productivity of onomasiological types starts from the needs of the speech community and distinguishes five onomasiological types and consists of three main elements (a determining constituent, a determined constituent of the onomasiological mark that stands for the concept, and the onomasiological base of the onomasiological mark that is like a head of a complex word). The productivity of each onomasiological type depends on the question which elements that constitute onomasiological structures are linguistically expressed at the onomasiological level indicating in that way language users' different cognitive processes and linguistic representation that regulate the act of naming (Štekauer et al., 2005).

The productivity at the level of word-formation types is also related to the conceptual categories. This enables the researchers to study different word-formation types within the same concept. For instance, the concept of Agent can have different word-formation types: Action – Agent (*writer*); Object – Action – Agent (*woodcutter*), etc. Different word-formation types used to form new words within the same concept represent a single word-formation type cluster. Every cluster is 100% productive and every single word-formation type can be computed internally, within the cluster.

The productivity at the level of morphological types shows that any word-formation type may have various morphological representations (*novelist* (N+*-ist*), *writer* (V+*-er*), etc.). They represent various morphological types used to form new complex words within one and the same conceptual category, which leads us to a single morphological type cluster. The cluster is 100% productive, and individual morphological types may be computed internally, within the particular cluster.

The productivity at the level of word-formation rules represents word-formation types and morphological types and therefore, the concept of Agent looks like this (Štekauer, 2005a, 2005b; Štekauer et al., 2005):

Action – Agent Verb *-er* (*driver*)

Instrument – Agent Noun (s) man (*oarsman*)

Object – Action – Agent Noun Verb *-er* (*wood-cutter*)

2. METHODOLOGY AND CORPUS

Our research is focused on adjective-forming prefixes and the productivity rate (PR) at the level of word-formation rules. The aim is to identify how many different concepts the analysed adjectives with different prefixes fall into and then present the productivity rate of word-formation types and morphological types for

every identified concept, i.e. word-formation type clusters (WFTC). Our research is based on the hypothesis that prefixes in English serve as efficient and practical tools for introducing supplementary semantic information into the structure of words. While it is true that any form of affixation can add semantic content to newly-formed lexemes, even if it is relatively minor, the specific aim of our study is to investigate the distinct role that prefixes play in this process. We contend that prefixes have a unique ability to convey nuanced meanings that can alter the overall sense of the word, thereby enriching the lexicon and enhancing communicative precision. It is important to note that, while the addition of new semantics is a fundamental requirement of all word-formation processes, the particular emphasis of our investigation is on the distinctive contributions made by prefixes in English.

The corpus used to generate examples is comprised of texts from news, literary, academic and TV registers:

Registers*	Sources	Number of words
News	<i>The Guardian, The Telegraph, The Sun</i> (2013)	100 590
Literary	Groff, Lauren. (2009). <i>Delicate Birds and Other Stories</i> , Hayes, Sadie. (2011). <i>The Start-Up. The Anti-Social Network</i> , Casey, Ryan. (2012). <i>What We Saw</i> , Keplinger, Kody. (2013). <i>Secrets and Lies</i>	187 040
Academic	<i>Moral Judgement and Decision Making</i> (2009), <i>The Handbook of Evolutionary Economic Geography</i> (2010) <i>NETWORK GEEKS: How They Built the Internet</i> (2013)	99 228
Television	<i>House</i> (2012), <i>The Vampire Diaries</i> (2010-2011), <i>Two and a Half Men</i> (2009), <i>The Big Bang Theory</i> (2011)	121 376
Total number of words		508 234

Table 1 – The corpus

* See Literature for abbreviations and details regarding stories selected for the literary register, papers in academic register and selected transcripts for television register.

We start the research by identifying adjectives with different prefixes with the help of computer software *AntConc* 3.2.4.² (Anthony, 2014). Every analysed adjective is then identified as a certain semantic concept, i.e., falling into a certain word-formation type cluster. All analysed clusters offer two pieces of information on adjectives in them: information regarding the interaction of different semantic concepts (word-formation types) and morphological elements (morphological types). Every cluster is 100% productive and thus every cluster offers productivity rates for different word-formation types and morphological types.

We decided not to incorporate big corpora, currently available to researchers, into our research for two reasons: not wanting to present irrelevant conclusions due to the size of our corpus and the frequency of similar questions in the academic discourse and the fact that big corpora would inevitably lead to numerous examples. All the analysed examples in this research were analysed manually, which would in case of big corpora require a group of people. By using our corpus, we wanted to include formal registers, but also the less formal ones in order to generate as many different examples as possible and present different paths pursued in different registers when forming words. We used analytic, descriptive and statistical methods in our analyses.

3. RESULTS AND ANALYSIS

After analysing the corpus, we came to 267 examples³ of adjectives with adjective-forming prefixes which fall into 5 different semantic concepts, i.e., word-formation type clusters: Quality (215 examples), Location (19), Quantity (13), Time (11) and State (9).

We will begin our analysis by showing the productivity rates (PR) of different word-formation types and morphological types for the concept of Quality as the most productive concept in terms of analysed examples:

²We downloaded the software at the following website: <http://www.laurenceanthony.net/software/antconc/>

³The number of examples refers to type frequency, i.e. the number of different words with the same prefix in our analysis (More on type frequency versus token frequency at Plag, 2003; Du & Zhang, 2010).

Word-formation types:*	Examples:	Total number of examples (215)	PR (100%)
negation – quality	<i>disloyal</i> (H S8 E 21) <i>illegal</i> (LPM 110) <i>invaluable</i> (DBSF 91) <i>nonmoral</i> (FRI 297) <i>unbeautiful</i> (DBM 45)	158	73.48%
quantity – quality	<i>extraordinary</i> (EEG 143) <i>hypercritical</i> (DT 19/8) <i>super-sexy</i> (TS 14/6)	51	23.72%
Morphological types:	Examples:	Total number of examples (215)	PR (100%)
prefix + stem	<i>amoral</i> (LPM 104)	215	100%
<i>a-</i> + adjective	<i>anti-political</i> (DT 29/4)	1	
<i>anti-</i> + adjective	<i>dishonest</i> (H S8 E19)	6	
<i>dis-</i> + adjective	<i>dysfunctional</i> (AAS 18)	5	
<i>dys-</i> + adjective	<i>extraordinary</i> (EEG 143)	1	
<i>extra-</i> + adjective	<i>hypersensitive</i> (H S8 E19)	8	
<i>hyper-</i> + adjective	<i>hypothermic</i> (DBW 70)	9	
<i>hypo-</i> + adjective	<i>illegal</i> (LPM 110)	9	
<i>il-</i> + adjective	<i>impossible</i> (BBT S5 E10)	1	
<i>im-</i> + adjective	<i>incorrect</i> (ICS 194)	10	
<i>in-</i> + adjective	<i>irregular</i> (H S8 E18)	35	
<i>ir-</i> + adjective	<i>nonobvious</i> (ICS 197)	11	
<i>non-</i> + adjective	<i>overconfident</i> (FRI 299)	12	
<i>over-</i> + adjective	<i>prototypical</i> (FRI 293)	15	
<i>proto-</i> + adjective	<i>pseudo-religious</i> (NG 77)	1	
<i>pseudo-</i> + adjective	<i>quasi-literary</i> (TG 29/4)	1	
<i>quasi-</i> + adjective	<i>redoubtable</i> (NG 18)	1	
<i>re-</i> + adjective	<i>semi-true</i> (DBB 57)	3	
<i>semi-</i> + adjective	<i>supernatural</i> (VD S2 E5)	5	
<i>super-</i> + adjective	<i>uneasy</i> (WWS 104)	5	
<i>un-</i> + adjective		76	

Table 2 – Morphological productivity of Quality at the level of word-formation rules

* We are not going to present all the analyzed word-formation types but only the most productive ones in most of the word-formation type clusters keeping the paper within the given guidelines.

We find 4 different word-formation types in this word-formation type cluster (WFTC) and one morphological type, which is not surprising given that our morphological analysis focused on the interaction between prefixes and stems, which is a shared characteristic across all clusters. It is important to note that we did not examine the internal structure of the stems themselves. The productivity rate of [negation – quality] word-formation type is the highest with 73.48% followed only by [quantity – quality] with 23.72%. All the other word-formation types scored lower than the aforementioned ones. The only morphological type, prefix + stem, shows the interaction of 20 different prefixes with various simple or complex adjectives. The majority of prefixes expressed negation (10 in total) or quantity (6), which aligns with the overall presence of these concepts in the most productive word-formation types. This cluster showcases how the analysed prefixes do not change the conceptual category of adjectives but only insert their meaning into the exiting conceptual category, and, for example, turn a positive feature into a negative one (*amoral, dishonest, impossible, uneasy*, etc.), make it reversative (*redoubtable*) or emphasise it (*extraordinary, hyperthermic*, etc.)

The following WFTC shows different word-formation types and morphological types for adjectives falling into the conceptual category of Location:

Word-formation types:	Examples:	Total number of examples (19)	PR (100%)
location – location	<i>subconscious</i> (H S8 E22) <i>intercontinental</i> (BBT S5 E2)	19	100%
Morphological types:	Examples:	Total number of examples (19)	PR (100%)
prefix + stem		19	100%
<i>inter-</i> + adjective	<i>inter-sectoral</i> (AAS 29)	13	
<i>intra-</i> + adjective	<i>intra-regional</i> (LID 453)	1	
<i>pre-</i> + adjective	<i>prefrontal</i> (FRI 281)	1	
<i>sub-</i> + adjective	<i>subconscious</i> (H S8 E22)	1	
<i>trans-</i> + adjective	<i>transatlantic</i> (NG 23)	3	

Table 3 – Morphological productivity of Location at the level of word-formation rules

We recorded one word-formation type in this WFTC. The only analysed word-formation type was [location – location]. The morphological type, prefix + stem, showed the interaction of 5 different prefixes with simple and complex adjectives. The results in this WFTC align in the same way as the results in the previous WFTC, i.e., all prefixes expressed location and only inserted the meaning without changing the conceptual category of adjectives. Their meanings differentiated, for example, between the location that included multiple entities (*inter-sectoral*) or a single entity (*intra-regional*).

We continue our analysis by presenting word-formation types and morphological types for adjectives that fall into the conceptual category of Quantity. The analysis is presented in the following table:

Word-formation types:	Examples:	Total number of examples (13)	PR (100 %)
quantity – quality	<i>suboptimal</i> (EEG 154)	3	23.07%
number – quality	<i>bisexual</i> (TS 29/4)	3	23.07%
quantity – location	<i>multi-locational</i> (EEG 154)	3	23.07%
Morphological types:	Examples:	Total number of examples (13)	PR (100%)
prefix + stem		13	100%
<i>bi-</i> + adjective	<i>bilateral</i> (HS8 E21)	4	
<i>extra-</i> + adjective	<i>extrawide</i> (DBF 101)	1	
<i>in-</i> + adjective	<i>infinite</i> (ICS 193)	1	
<i>macro-</i> + adjective	<i>macro-institutional</i> (EEG 154)	1	
<i>mono-</i> + adjective	<i>monocultural</i> (NG 34)	1	
<i>multi-</i> + adjective	<i>multi-national</i> (AAS 13)	3	
<i>sub-</i> + adjective	<i>subatomic</i> (NG 19)	2	

Table 4 – Morphological productivity of Quantity at the level of word-formation rules

There are 6 different word-formation types in this WFTC. The same PR is shared by 3 types: [quantity – quality], [number – quality] and [quantity – location] with 23.07% respectively. All the other word-formation types scored lower than

the aforementioned ones. Morphological analysis shows the interaction of 7 different prefixes with simple or complex adjectives. This cluster exemplifies various characteristics that prefixes show when inserting semantic pieces of information. Some prefixes can be recorded in different clusters, i.e., conceptual categories, not changing their conceptual category. Such prefixes are, in our case, *extra-* and *in-*, prefixes that express quantity and negation respectively in this cluster but also with adjectives falling into the conceptual category of Quality. Some prefixes have numerous meanings such as *sub-*, which, in this cluster expresses quantity, but with adjectives falling into the conceptual category of Location, it expresses location. We also have prefixes that change the quality expressed by adjectives and influence the conceptual category, i.e., cluster (*bisexual* – *attracted to both men and women*, *macro-institutional* – *referring to the overall organisation of institutions*, *monocultural* – *referring to the growth of a single organism*, *multi-national* – *including several nationalities*), which makes them as relevant for the meaning as the adjective itself.

Our next WFTC shows the analysis of adjectives falling into the conceptual category of Time:

Word-formation types:	Examples:	Total number of examples (11)	PR (100%)
time – time	<i>neoclassical</i> (AAS 17)	6	54.54%
time – quality	<i>postconventional</i> (LPM 108)	3	27.27%
time – action	<i>preoperative</i> (FRI 278)	2	18.18%
Morphological types:	Examples:	Total number of examples (11)	PR (100%)
prefix + adjective		11	100%
<i>neo-</i> + adjective	<i>neo-Darwinian</i> (AAS 6)	5	
<i>post-</i> + adjective	<i>postoperative</i> (FRI 278)	3	
<i>pre-</i> + adjective	<i>prehistoric</i> (NG 22)	3	

Table 5 – Morphological productivity of Time at the level of word-formation rules

There are 3 different word-formation types in this WFTC and we find 3 prefixes interacting with various complex adjectives. The highest productivity rate is achieved

by [time – time] with 54.54% followed by [time – quality] (27.27%) and [time – action] (18.18%). Some prefixes just insert the information without changing the conceptual category of the stem (*neoclassical*), but some prefixes found in the analysis help us understand the timeline better, for example, whether the description of time refers to before (*preoperative*) or after (*postoperative*), emphasising as well the importance of the influence the prefixes have on the change that happens with the conceptual category of the stem. The prefix *pre-* can be seen in this cluster as well as within the conceptual category of Location, which exemplifies numerous meanings that some prefixes might insert, in this particular case, Time (*prehistoric*, *preoperative*) or Location (*prefrontal*).

Our analysis continues with adjectives that fall into the conceptual category of State:

Word-formation types:	Examples:	Total number of examples (9)	PR (100 %)
negation – state	<i>unaware</i> (NG 22)	9	100%
Morphological types:	Examples:	Total number of examples (9)	PR (100%)
prefix + stem <i>un-</i> + adjective	<i>unhygenic</i> (BBT 55 E2)	9	100%

Table 6 - Morphological productivity of State at the level of word-formation rules

We find one word-formation type in this WFTC and we analysed the interaction between only one prefix (*un-*) and various simple or complex adjectives, all expressing state. The prefix *un-* is a very frequent prefix with adjectives that fall into the conceptual category of Quality and we find it there with the same meaning as in this cluster. The overall meaning of the adjective is sometimes already known from the stem itself and the prefix makes it more defined, which is the case in this cluster as well as in the majority of clusters where prefixes do not change the conceptual category of adjectives.

4. CONCLUDING REMARKS

The analysis included 267 examples of different complex adjectives containing various adjective-forming prefixes. After identifying the semantic concepts for every analysed adjective, we categorised them into 5 word-formation type clusters (Quality, Location, Quantity, Time and State). Every cluster offered two pieces

of information: the number of word-formation types and morphological types. All clusters recorded only one morphological type (prefix + stem), which is not surprising given that the analysis was focused on the interaction of prefixes and stems not going into the stem structure analysis.

After the analysis of word-formation types, we can say there is no clear link between the number of analysed examples and the number of word-formation types. The most productive WFTC in terms of analysed examples was *Quality* with 215 adjectives, but not in terms of word-formation types with only 4 recorded. *Quantity*, nevertheless, with only 13 analysed examples was the most productive WFTC in terms of word-formation types with 6 recorded in the analysis. The highest productivity rates of different word-formation types in different word-formation type clusters showed that in the majority of examples the concept was expressed by the stem and usually just refined by prefixes. The only exceptions were *Quantity* and *Time* where the interaction between prefixes and stems in some examples put an equal emphasis on both elements when determining the WFTC.

The morphological analysis included 31 adjective-forming prefixes occurring in one or multiple word-formation type clusters. We cannot say that there is a link between the number of analysed prefixes and the number of word-formation types. The most productive WFTC in terms of analysed prefixes was *Quality* with 20, but only 4 word-formation types, while *Quantity* records 7 prefixes and 6 word-formation types. In all the analysed examples, the stem was always realised by various simple or complex adjectives.

In conclusion, our research has successfully supported the hypothesis that prefixes in English are an effective means of enhancing semantic information in word-formation. Our analysis of the characteristics of adjective-forming prefixes has demonstrated that they refine the core meaning of stems without changing their conceptual category (*amoral, intercontinental, unbeautiful, etc.*). Additionally, prefixes can convey different meanings across various conceptual categories (*uneasy, unaware, subconscious, suboptimal, etc.*) and can even influence the overall conceptual category of the resulting word becoming equally important as the stems themselves (*bisexual, preoperative, postoperative, etc.*). The findings of our study contribute to a better understanding of the role of prefixes in enriching the lexicon and improving communicative precision in the English language. By examining the patterns of semantic interactions and morphology in word-formation, our research provides valuable insights into the mechanisms by which English words are formed. Overall, our study underscores the importance of prefixes in English word-formation and highlights their significance as a tool for conveying nuanced meanings.

References

1. Anthony, L. (2014) *AntConc (Version 3.2.4)*. [Computer Software]. Tokyo, Japan, Waseda University. <http://www.laurenceanthony.net/software/antconc/> [Accessed 12th May 2022].
2. Aronoff, M. (1983) Potential words, actual words, productivity and frequency. *Proceedings of the 13th International Congress of Linguists*, 163–171.
3. Aronoff, M. (1976) *Word Formation in Generative Grammar*. Cambridge, Massachusetts, The MIT Press.
4. Baayen, H. R. (1992) Quantitative aspects of morphological productivity. *Yearbook of Morphology 1991*. Dordrecht, Kluwer, 109–149.
5. Baayen, H. R. & Neijt, A. (1997) Productivity in context: a case study of a Dutch suffix. In *Linguistics* 35, 565–587. DOI: 10.1515/ling.1997.35.3.565.
6. Baayen, H. R. & Renouf, A. (1996) Chronicling *The Times*: productive lexical innovations in an English newspaper. *Language*. 72, 69–96. <http://www.sfs.uni-tuebingen.de/~hbaayen/publications.html> [Accessed 10th January 2013].
7. Baayen, H. R. (1993) On frequency, transparency and productivity. *Yearbook of Morphology 1992*. Dordrecht, Kluwer, 181–208.
8. Baayen, H. R. (1994) Derivational Productivity and Text Typology. *Journal of Quantitative Linguistics*. 1, 16–34. DOI: 10.1080/09296179408589996.
9. Bauer, L. (2004) *Morphological Productivity*. Cambridge, Cambridge University Press.
10. Du, L. & Zhang, X. (2010) A Survey of the Measurements of Morphological Productivity. *English Language Teaching*. 3 (1). Dalina, China. DOI:10.5539/elt.v3n1p60.
11. Fernández-Domínguez, J., Díaz-Negrillo, A. & Štekauer, P. (2007) How is Low Productivity Measured?. *Atlantis*. www.atlantisjournal.org/archive/29.1./2007fernandez_diaz_stakauer.pdf [Accessed 10th January 2013].
12. Grzega, J. (2002) Some Thoughts on a Cognitive Onomasiological Approach to Word-Formation with Special Reference to English. *Onomasiology Online*. 3, 1–29. <https://www1.ku.de/SLF/EnglVglSW/OnOn.htm> [Accessed 20th March 2013].
13. Harris, Z. S. (1951) *Methods in Structural Linguistics*. Chicago, IL and London, University of Chicago Press.
14. Hay, J. & Baayen, H. R. (2002) Parsing and Productivity. *Yearbook of Morphology 2001*. Dordrecht, Kluwer Academic Publishers. <http://www.sfs.uni-tuebingen.de/~hbaayen/publications.html> [Accessed 20th January 2013].
15. Hay, J. & Baayen, H. R. (2003) Phonotactics, parsing and productivity. In *Revista di Linguistica* 15 (1). <http://www.sfs.uni-tuebingen.de/~hbaayen/publications.html> [Accessed 10th January 2013].
16. Lieber, R. (1981) *On the Organization of the Lexicon*. Bloomington. MIT PhD Dissertation. Bloomington, Indiana University Linguistics Club.
17. Plag, I. (2003) *Word-Formation in English*. Cambridge, Cambridge University Press.

18. Plag, I., Dalton-Puffer, C. & Baayen, H. R. (1999) Productivity and register. *English Language and Linguistics*. 3, 209–228.
19. Štekauer, P. et al. (2005) Word-formation as creativity within productivity constraints: sociolinguistic evidence. *Onomasiology Online* 6, 1–55. <http://www1.ku-eichstaett.de/SLF/EngluVglSW/stekauer1051.pdf> [Accessed 20th March 2014].
20. Štekauer, P. (2005a) Onomasiological Approach to Word Formation. In: P. Štekauer & R. Lieber (eds.). *The Handbook of Word-Formation*. Netherlands, Springer, pp. 207–232.
21. Štekauer, P. (2005b) *Meaning Predictability in Word Formation. Novel, context-free naming units*. Amsterdam/Philadelphia, John Benjamins Publishing Company.
22. Yule, G. (1996) *The study of language. Second Edition*. Great Britain, Cambridge University Press.
23. Žarković Mccray, M. (2022) Morphological Productivity of Compound Nouns in English at the Level of Word-Formation Types. *Наука и стварност. Зборник radova sa naučnoг skupa*. Књига 15. Пале, Филозофски факултет Универзитета у Источном Сарајеву, 459–477.
24. Žarković Mccray, M. M. & Kujundžić, M. R. (2022) Morfološka produktivnost složenih imenica u engleskom jeziku na nivou pravila tvorbe. *PHILOLOGIST – journal of language, literary and cultural studies*. 25, 49–67. DOI: 10.21618/fil2225049z.
25. Žarković, M. M. (2017) Razlika između takozvanih morfološki mrtvih i određene grupe neproduktivnih prefiksa u tvorbi imenica i pridjeva u engleskom jeziku. *Radovi Filozofskog fakulteta. Filološke nauke* 19. Pale, Filozofski fakultet Univerziteta u Istočnom Sarajevu, 83–100.
26. Žarković, M. M. (2019a) Razlika između takozvanih morfološki mrtvih i određene grupe neproduktivnih sufiksa u tvorbi imenica i pridjeva u engleskom jeziku. *Nauka i stvarnost. Zbornik radova*. Knjiga 13. Pale, Filozofski fakultet Univerziteta u Istočnom Sarajevu, 312–332.
27. Žarković, M. M. (2019b) Produktivni prefiksi u tvorbi imenica u engleskom jeziku. *Radovi Filozofskog fakulteta (časopis za humanističke i društvene nauke)* 21. Pale, Filozofski fakultet Univerziteta u Istočnom Sarajevu, 151–171.
28. Жарковић, М. (2017) Како мјерити морфолошку продуктивност творбених процеса у енглеском језику без Бајенових формула. *Наука и стварност. Зборник Radova*. Књига 11. Том 1. Пале, Филозофски факултет Универзитета у Источном Сарајеву, 273–291.

Corpus:

Newspaper register [Accessed from April through August 2013]:

1. www.theguardian.co.uk (TG)
2. www.telegraph.co.uk (DT)
3. www.thesun.co.uk (TS)

Literary register [Retrieved from <http://www.freebookspot.es/>, accessed in April 2013]:

1. Groff, L. (2009) *Delicate Birds and Other Stories*. Hyperion
2. *Lucky Chow Fun (DBLCF)*
3. *L.DeBard and Aliette (DBLDA)*
4. *Majorette (DBM)*
5. *Blythe (DBB)*
6. *The Wife of the Dictator (DBTWD)*
7. *Watershed (DBW)*
8. *Sir Fleeting (DBSF)*
9. *Fugue (DBF)*
10. *Delicate Edible Birds (DBDEB)*
11. Hayes, S. (2011) *The Start-Up. The Anti-Social Network*. Backlit Fiction (*ASN*).
12. Casey, R. (2012) *What We Saw*. Higher Bank Books. Amazon Kindle Edition (*WWS*).
13. Keplinger, K. (2013) *Secrets and Lies*. New York: Poppy, Hachette Book Group.
14. *People Worth Knowing (SLPWK)*

Academic register [Retrieved from <http://www.freebookspot.es/>, accessed in June 2013]:

1. Ginges, J. & Atran, S. (2009) Noninstrumental Reasoning over Sacred Values: An Indonesian Case Study. In: D. Bartels, C. Bauman, L. Skitka & D. Medin (eds.) *Moral Judgement and Decision Making*. San Diego, Eslevier, pp. 193–206.
2. Bilz, K. & Nadler, J. (2009) Law, Psychology, and Morality. In: D. Bartels, C. Bauman, L. Skitka & D. Medin (eds.) *Moral Judgement and Decision Making*. San Diego, Eslevier. (*LPM*), pp. 101–131.
3. Connolly, T. & Hardman, D. (2009) “Fools Rush In”: A JDM Perspective on the Role of Emotions in Decisions, Moral and Otherwise. In: D. Bartels, C. Bauman, L. Skitka & D. Medin (eds.) *Moral Judgement and Decision Making*. San Diego, Eslevier. (*FRI*), pp. 275–306.
4. Boschma, R. & Martin, R. (2010) The aims and scope of evolutionary economic geography. In: R. Boschma & R. Martin (eds.) *The Handbook of Evolutionary Economic Geography*. Cheltenham, UK, Edward Elgar Publishing Limited. (*AAS*), pp. 3–39.
5. Stam, Erik. (2010) Entrepreneurship, evolution and geography. In: R. Boschma & R. Martin (eds.) *The Handbook of Evolutionary Economic Geography*. Cheltenham, UK, Edward Elgar Publishing Limited. (*EEG*), pp. 139–161.
6. Hassink, R. (2010) Locked in decline? On the role of regional lock- ins in old industrial areas. In: R. Boschma & R. Martin (eds.) *The Handbook of Evolutionary Economic Geography*. Cheltenham, UK, Edward Elgar Publishing Limited. (*LID*), pp. 450–468.

7. Carpenter, B. E. (2013) *NETWORK GEEKS: How They Built the Internet*. New York, Copernicus Books Springer Science+Business Media. (NG), pp. 9–79.

TV register [Accessed in April 2013]:

1. *HOUSE* (2012), (Season 8, Episodes 18, 19, 20, 21 and 22) Retrieved from <http://clinic-duty.livejournal.com/> (*H*)
2. *THE VAMPIRE DIARIES* (2010-2011), (Season 2, Episodes 5, 7, 16, 19 and 22) Retrieved from http://vampirediaries.wikia.com/wiki/Season_Two (*VD*)
3. *TWO AND A HALF MEN* (2009), (Season 7, Episodes 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10) Retrieved from <http://torrentz.eu/> (*TAHM*)
4. *THE BIG BANG THEORY* (2011), (Season 5, Episodes 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10) Retrieved from <http://bigbangtrans.wordpress.com/> (*BBT*)

Maja M. Žarković Mccray
Univerzitet u Istočnom Sarajevu
Filozofski fakultet Pale
Katedra za anglistiku

MORFOLOŠKA PRODUKTIVNOST PREFIKSA U TVORBI PRIDJEVA U ENGLESKOM JEZIKU NA NIVOU PRAVILA TVORBE

Rezime

Rad se bavi proučavanjem morfološke produktivnosti prefiksa koje se koriste za tvorbu pridjeva na nivou pravila tvorbe. Produktivnost na nivou pravila tvorbe predstavlja proučavanje produktivnosti na nivou tvorbenih tipova i morfoloških tipova. Osnovni cilj rada jeste ponuditi informacije o interakciji različitih semantičkih koncepata, što je suština proučavanja produktivnosti na nivou tvorbenih tipova, zajedno sa različitim morfološkim strukturama koje se proćavaju na nivou morfoloških tipova. Nakon analize korpusa koji se sastoji od tekstova preuzetih iz novinskog, književnog, stručnog i televizijskog registra, dolazimo do 267 primjera pridjeva i, uz upotrebu deskriptivno-analitičke i statističke metode, zaključujemo da pridjevi koje smo pronašli u korpusu mogu da se svrstaju u pet različitih tvorbenih skupova (kvalitet, lokacija, kvantitet, vrijeme i stanje). Najveću stopu produktivnosti bilježe tvorbeni tipovi gdje stem određuje koncept za cijeli skup, a prefiksi su tu samo da dodatno pojašne značenje. Jedini izuzeci bili su skupovi kao što su kvantitet i vrijeme, gdje smo pronašli tvorbene tipove u kojima je koncept zavisio podjednako od stema i od prefiksa. Analiza morfoloških

tipova pokazuje da prefiksi koji ubacuju dodatne semantičke poruke u strukturu riječi bilježe najveći stepen produktivnosti i da mogu da se pojave u jednom ili više skupova. Jedini izuzeci pronađeni su sa skupovima kao što su kvantitet i vrijeme.

► *Ključne riječi:* morfološka produktivnost, tvorbeni skupovi, pravila tvorbe, tvorbeni tipovi, morfološki tipovi, prefiksi u tvorbi pridjeva u engleskom jeziku.

Preuzeto: 9. 9. 2022.
Korekcije: 21. 4. 2023.
Prihvaćeno: 22. 4. 2023.