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THE ACT OF NAMING AND MEANING PREDICTABILITY IN THE PROCESS OF LANGUAGE PRODUCTION

ПРОЦЕС НАЙМЕНУВАННЯ ТА ПЕРЕДБАЧУВАНОСТІ ЗНАЧЕННЯ В ПРОЦЕСІ МОВНОЇ ПРОДУКТИВНОСТІ

Мовна продуктивність і її продукти, а також процес найменування – це насправді складні явища, які потребують детального вивчення. Характер та характеристики певного екземпляра лінгвістичної продуктивності та його продуктів фактично визначаються комбінацією абсолюто різних чинників.

__Метою даного дослідження__ є визначення рівня передбачуваності значення нових одиниць найменування за умов їх контекстно-вільної інтерпретації. Передбачуваність значення визначається у свідношенні всіх можливих значень нової одиниці мови, зокрема, як ступінь ймовірності того, що конкретне значення одиниці найменування, яку користувач мови зустрічає вперше , буде вважатися переважаючою по відношенню до інших можливих значень цієї одиниці. Таким чином, увага зосереджена на активній комунікації користувачів мови. Чим більше відомо про джерела та процеси передбачуваності значення, тим простішим стає процес розуміння та сприйняття нової лексики, а також її використанням загалом.

__Наукова новизна__ даного дослідження полягає в тому, що темі передбачуваності найменування все ще не наділено належної уваги, а тому представляє собою широку сферу актуальних досліджень. Вивчення ономасіологічної значимості та явища закріпленості також є відносно новим, і існує ряд відкритих питань, які є важливими в контексті подальшого розвитку галузі.

__Методологія.__ Основними лінгвістичними методами дослідження є: описовий, порівняльний та нормативно-стилістичний.

__Практична значущість__ дослідження полягає в доведенні, що в межах кількох можливих трактувань нова одиниця найменування завжди придумується з одним конкретним значенням, яке в подальшому стає найкращим варіантом для інтерпретації цієї одиниці найменування з точки зору слухача/читача. Таким чином, передбачуваність значень визначається стосовно всіх можливих значень нової одиниці найменування, зокрема, як ступінь ймовірності того, що конкретне значення одиниці найменування, з яким користувач мови зустрічається вперше, буде мати перевагу перед іншими можливими значеннями цієї одиниці найменування.

__Ключові слова:__ процес найменування, передбачуваність значення, мовна продуктивність, ономасіологічна значимість, семасіологічна значимість, закріпленість.

Meaning predictability and its products, as well as the act of naming, are in fact complex phenomena that need to be studied in detail. The nature and characteristics of a particular instance of linguistic productivity and its products are actually determined by a combination of completely different factors.

__The purpose of this study__ is an examination of the predictability of meaning(s) of novel naming units under the conditions of their context-free interpretation. Meaning predictability is defined in relation to all the possible meanings of a new naming unit, in particular, as the degree of probability that a particular meaning of a naming unit, encountered for the first time by a language user, will be picked up in preference to other possible meanings of that naming unit. Therefore, the focus will be on the listener's/reader's (meaning the interpreter's) side of the communication channel. The more we know about the sources and processes of meaning predictability, the better our chances of coping with new vocabulary and its usage in general.

__The novelty__ of the research stands for the facr, that the meaning predictability of naming units have not yet been paid adequate attention, and therefore represent an unfathomed area. The study of onomasiological salience and entrenchment is also relatively new, and there are a number of open issues constitute a challenge that may guide the further development of the field.

__Methodology.__ The main linguistic methods used in this research are : descriptive, comparative and normative-stylistic.

__The conclusion__ is that this research proved that within multiple possible readings, a new naming unit is always coined (obviously) with one specific meaning in the coiner's mind, that becomes the best candidate for the interpretation of that naming unit from the listener's/reader's point of view. Meaning predictability is therefore defined in relation to all the possible meanings of a new naming unit, in particular, as the degree of probability

that a particular meaning of a naming unit, encountered for the first time by a language user, will be picked up in preference to other possible meanings of that naming unit.

Key words: *act of naming, meaning predictability, language production, onomasiological salience, semasiological salience, entrenchment.*

Introduction. The act of naming is among the most basic actions of language. Indeed, it is naming something that enables us to communicate about it in specific terms, whether the object named is human or non-human, animate or inanimate. It is not a purely linguistic act. Naming units do not come into existence in isolation from factors, such as human knowledge, human cognitive abilities, experiences, discoveries of new things, processes, and qualities, human imagination, etc. By implication, any naming act is necessarily preceded (or dominated) by a network of 'objectively' existing relationships. In choosing among existing alternatives, the individual language user takes into account their sociolinguistic, non-referential value, and conversely, the expansion of a change over a language community is the cumulative effect of individual choices. Each new naming unit results from a particular naming act performed by one particular member of a speech community who coins a new naming unit with one specific meaning in mind. It means that each such coinage is or approaches an ideal linguistic sign, i.e., the unity of a unique form and a unique meaning (biuniqueness). Stated simply, on the coiner's side, a new form corresponds to a single meaning. An object to be named is conceived by Dokulil as "the one not named in isolation but is envisaged in relation to the existing objects. By implication, any naming act is necessarily preceded (or dominated) by a network of 'objectively' existing relationships. By implication, the naming act is a cognitive phenomenon relying on the intellectual capacities of a coiner" [3].

The analysis of the recent researches and publications, which initiated the solution of this problem. The predictability of novel, context-free naming units correlates with the acceptability of their meanings to listeners/readers. In other words, it is assumed that language users, when facing a naming unit that they have never heard/read before, prefer the interpretation which, in their view, is most acceptable. The most acceptable reading is therefore considered to be the most predictable of all those readings that come to a speaker's mind. A context-free interpretation approaches novel naming units from the level of langue , and refers to that (those) meaning(s) that have the highest chance of being selected when used by language users. Only a small fraction (usually one or two) of the whole range of possible meanings of any novel naming units is actually predictable [12]. The notion of meaning predictability cannot and does not imply the

selection of a single 'correct' meaning. Each act of naming admits more than one possible path leading to the resulting naming unit. Which of the possible paths is taken by a coiner is determined by both linguistic factors and extra-linguistic factors. The relation between the act of word formation and the act of word interpretation (i.e., the act of meaning prediction) is fairly complex. The well known scheme that represents a crucial triad of relations between extra-linguistic reality (object to be named), a speech community (represented by a 'coiner'), and the word-formation component, emphasising, that each act of naming responds to a very real and specific naming demand on the part of a member (members) of speech community [4]. This approach is in accordance with Bauer's assumption that "the fact remains ... that the production of new words may be the only evidence the observer has of this potential, and the lack of new words appears to deny the potential" [1: 21] and that "...words are only formed as and when there is a need for them, and such a need cannot be reduced to formal terms" [1: 143]. In principle, the conception of productivity as implemented capacity corresponds with Bauer's [1] notion of 'profitability'. The focus will be on the listener's/reader's (meaning the interpreter's) side of the communication channel. Geeraerts [5] stated, that "hearers and readers may be focused on the interpretative, semasiological side of language, but for the speaker or writer, categorizing experience and putting that categorization into words is the primary linguistic activity. As suggested in Štekauer [8; 9], what seems to be crucial is that by coining a naming unit in response to the specific demand of a speech community the particular language manifests its productive capacity to provide a new, well-formed linguistic sign by employing its productive Types/Rules whenever need arises. While morphologists mostly address the question of the identification of possible meanings of new naming units (reflected in classifications of various degrees of detail) psycholinguists tend to discuss the factors affecting the comprehension of the meaning of new naming units on a general level. The predictability of meanings of affixations, conversions (with few exceptions, such as Clark & Clark 1979; Beard 1995; Kiparsky 1997), and other coinages has been, to the Štekauer's knowledge [13], generally ignored. Any act of word formation is both rule-governed and creative, as far as a coiner's creativity restricted by productive WF Rule constraints. There are circumstances that make the relation between the act of

word formation and the act of word interpretation (i.e., the act of meaning prediction) fairly complex. A context-free interpretation approaches novel naming units from the level of langue, and refers to that (those) meaning(s) that have the highest chance of being selected when used by language users [13]. The inclusion of speech community in the model and viewing each new naming unit as a result of a very specific and real act of naming by a coiner makes it possible to reflect individual preferences, the influence of one's age, education, and profession, one's linguistic background (in a bilingual setting), fashionable trends, etc., i.e., the sociolinguistic factors which may affect the application of the MSAP (Morpheme-to-Seme-Assignment Principle) in those cases that provide more than one option [1]. The triad of relations existing between the indispensable components of each act of naming: the class of objects of the extra-linguistic reality to be named – (a member of) the speech community who performs the act of naming – the word-formation component of the language system (langue) acting in close cooperation with the lexical component [4]. Štekauer stated "while there is always one particular meaning of a novel, context-free word which is most predictable at the level of system, and therefore expected to be selected in speech, the specific circumstances of its coining may work counter to the expectations of a language user [13]. Conceived this way, context-free meaning predictability provides a general, objective, and unbiased view of the interpretation of novel naming units, undistorted by the infinite number of potential linguistic and extra-linguistic contexts that may influence and condition a specific act of using a naming unit.

Thus, **the purpose of this study** is an examination of the predictability of meaning(s) of novel naming units under the conditions of their context-free interpretation. Meaning predictability is defined in relation to all the possible meanings of a new naming unit, in particular, as the degree of probability that a particular meaning of a naming unit, encountered for the first time by a language user, will be picked up in preference to other possible meanings of that naming unit. Therefore, the focus will be on the listener's/reader's (meaning the interpreter's) side of the communication channel. The more we know about the sources and processes of meaning predictability, the better our chances of coping with new vocabulary and its usage in general.

Presentation of the main research results. Any act of word formation is both rule-governed and creative. Logically speaking, two situations may occur: either the changes work in parallel, or they take place serially. The first type occurs when members of a speech community are con-fronted with the same communicative, expressive problem, and independently choose the same solution. The introduction of the word *Wi-Fi* as a loan from English into German (and many other languages) to some extent proceeded in this way. More or less simultaneously, a number of people face the problem of giving a name to the new thing in their native language; independently of each other, they then adopt the original name that comes with the newly introduced object. Still there is typical German word *WLAN* (which is widely used in some regions of German speaking countries), that is technically indicating is also an English acronym, as well as Wi-Fi, and they should be used for different types of networks:

Wlan (wireless local area network) should be used for your corporate wireless network at work or for your personal wireless network at home;

Wi-Fi (wireless fidelity) should be used for a publicly available wireless internet access at airports, cafes, libraries, etc.

Still this rule is not followed in real life and both are nowadays used as synonyms, with the advantage of using the word *Wi-Fi* as more common.

The second type occurs when the members of a speech community imitate each other. For instance, when one person introduces a loan word, a few others may imitate him, and they in turn may be imitated by others, and so on [4].

Fundamentally, what is at issue here is the distinction between the presence of an item and the preference language users may have for that item. For example the word *PayPal* ("paying your pal") that indicates an e-commerce money transfer business, formed 2000. The system, as well as the word was launched by Levchin and Thiel, whose idea was that *PayPal* would enable the electronic transfer of money among handheld devices. Its mission to give people better ways to connect to their money and to each other expressed in the wide use of this system as well as the entry of the word into the other languages.

If language users face a naming unit that they have never heard/read before, they will prefer the interpretation which, in their view, is most acceptable. The most acceptable reading is therefore considered to be the most predictable of all those readings that come to a speaker's mind. Our research is focussed mainly on the possible meaning combinations of compound constituents. The possible meaning combinations and the predictability of these individual meanings are, however, two different, even if closely related, things. Possible meanings differ in their chances of becoming institutionalised units of the lexicon, and not all of them are equally acceptable to language users. We decided to distinguish between the two

concepts using an onomasiological approach. It is the onomasiological approach that emphasizes the cognitive-semantic component of language and the primacy of extra-linguistic reality in the process of naming. Making onomasiological choices is an epistemologically fundamental feature of language, to the extent that it is a basic linguistic act on the side of language production. Onomasiological categories are thus defined as the essential conceptual structures establishing the basis for the act of naming. In principle, they consist of two elements. The phenomenon to be named is first classed with a certain conceptual group and functions as onomasiological base. Then, within the limits of this group, it is determined by an onomasiological mark. For example, the onomasiological base of blackberry is berry (because the concept of BERRY is common to the whole conceptual group of various berries). Its onomasiological mark is black. Also in this approach to research we have to take into account the semasiological approach. This is because onomasiology and semasiology must go hand in hand in research about the act of naming, meaning predictability, and changing relation between words and concepts. Both these branches of linguistics deal with the relationships between words, reproduction, and reality. Therefore it is helpful to interlink both disciplines. We could say that onomasiology and semasiology approach the same problem from different sides.

The distinction between semasiology and onomasiology, then, equals the distinction between meaning and naming: semasiology takes its starting-point in the word as a form, and charts the meanings that the word can occur with; onomasiology takes its starting-point in a concept, and investigates by which different expressions the concept can be designated, or named [2].

In 2016 Geeraerts stated, that "hearers and readers may be focused on the interpretative, semasiological side of language, but for the speaker or writer, categorizing experience and putting that categorization into words is the primary linguistic activity [5]. In order to verify the validity of this statement and reproduce the naming process algorithm, we conducted the following study. For analysis we chose the word *island grid*. At first we found in the magazine the pictures of island grid. The image below was found in the article of Holmbacka, Silva, Chv´alek [7]. With the help of it we built up a referential description, a description with features, so we translated the picture into features.

We were considering the features as characteristics that could be useful for describing island grid:

– a grid is typically smaller and less diverse than major market grids;

– it is not benefiting from interconnection with a continental electricity grid (or in a limited way only);

– all of the electricity needed are produced locally;

– Renewable energy-such as wind, solar and micro-hydro – introduces a path to escape from fossil fueled generation, but at a cost to grid stability.

Thus we could see how the features co-occur. We have a representation of the semasiological range of category as a cluster of overlapping subsets. That is from a more theoretical point of view is a family resemblance representation [6]. Then we had a look at the evolution of the category over some period of time we studied. For example a major real-world islanding experiment was carried out in the Netherlands in 1999. The theoretical predictions were true. *Islanding* is the condition in which a distributed generator (DG) continues to power a location even though electrical grid power is no longer present. A 2004 Canadian report concluded that in the case of a power outage, the solar (wind) panels will continue to deliver power as long as irradiance is sufficient. In this case, the circuit detached by the outage becomes an "island" [15]. For the present time, islanding operation is critically studied and analysed by the researchers to present the best solutions for a technically coordinated operation of the island grid [2].

According to the analysis of the evolution of the category over a period of time, we can track the representations of certain features, and when do they overlap, that simply means that the features co-occur. Here we have the basic overlapping ones: 1) *island grid* works as a well coordinated system, which corresponds to the definition of the *"grid"* in the meaning of network of lines that cross each other to form a series of squares or rectangles; 2) no need for an electrical grid power as far as island grid is remote from other energy sources, that indicates the naming *"island"* as something separate and isolate; 3) the statement that solar panels continue to deliver power as long as irradiance is sufficient confirms the fact that island grid runs exclusively on renewable sources of energy; 4) the number of DGs introduced into electricity distribution systems is increasing constantly, that indicates the relevance of the use of island grids at the present time.

This is the way how we reproduced the naming process algorithm with the help of categorizing experience and putting that categorization into words through the prism of the onomasiological process. Thus the basic scheme is confirmed once again. This scheme represents a crucial triad of relations between extra-linguistic reality

(object to be named), a speech community (represented by a 'coiner') and the word-formation component, thus emphasising the fact, ignored by the vast majority of the mainstream word-formation theories, that each act of naming responds to a very real and specific naming demand on the part of a member (members) of speech community. The above-mentioned triad reflects the following principles: It lays emphasis on the active role of language users in the process of giving names to objects instead of presenting wordformation as an impersonal system of rules detached from the objects named and from language users.

Language production takes the form of onomasiological choices of a formal and conceptual nature, and the concept of onomasiological salience involves the relative frequency with which such choices are made. As such, a focus on onomasiological salience is a focus on what may well be the most fundamental feature of language production. Salience on the onomasiological level involves a preference for one expression over another as the name for a particular referent or type of referent, while semasiological salience is a relationship among the various semantic possibilities of a given lexical item .The study of onomasiological salience is relatively new, and there are a number of open issues constitute a challenge that may guide the further development of the field. For example, it is known that clearly demarcated senses may be expressed by mutually competitive synonyms. Onomasiological salience has to do with choices and preferred choices. That's choosing one category rather than the other or choosing one category more frequently rather than the other. Technically speaking, onomasiological salience is the proportion of the frequency of the category name and names, over the frequency of the category referents. Still, in this case I would like to highlight two hypothesis:

– Entrenchment should not be seen in terms of raw frequency.

– Entrenchment should not be seen in psychological terms only.

Why have a closer look at entrenchment? The notion of entrenchment, basically equals frequency of occurrence, but raw frequency is an unsophisticated and misleading measure of semantic and sociolinguistic effects. Thus, how can we refine the notion of entrenchment? Firsly, we have to clarify why do raw frequencies amount to zero. Presumably, a lot of what speakers say is available in memory in some kind of prepackaged, ready-made format [5]. Convincing evidence for this claim are the words of a language, since these represent nothing else than conceptualizations that have been fossil-

ized by convention in a speech community. The reason is that familiar concepts like "cat" or "sphinx" are deeply entrenched in our memory so that their activation has become a highly automated routine. When we are faced with a more exotic animal, say a tapir in a zoo, the situation will be different, because the cognitive processes relating the perceptual input that determines the target conceptualization to the corresponding phonological unit are less well entrenched. Clearly, then, the conceptual unit "tapir", which is represented by this cluster of attributes, is less well entrenched than the cognitive unit "cat".

Every use of a structure has a positive impact on its degree of entrenchment, whereas extended periods of disuse have a negative impact. Entrenchment, but frequency of use with regard to a specific meaning or function in comparison with alternative expressions of that meaning or function. Entrenchment of concepts or constructions not only depends on the frequency of activation by individual speakers (and in that sense is not a completely private matter), but it also applies to languages as such and whole speech communities, because the frequency of occurrence of concepts or constructions in a speech community has an effect on the frequency with which its members are exposed to them [10; 11]. The degree of entrenchment of concepts is also thought to correlate with the frequency with which they are activated: the more frequently a concept is activated, the more entrenched it will become, and, vice versa, the more entrenched a concept is, the easier and therefore more frequently it will be activated [5]. The implication is that this results in some kind of collective automatization effect, which makes it possible to talk of the degree of entrenchment of a concept or construction in a given language. There is no general agreement on how to define the concepts underlying the terms entrenchment and salience. However, unlike in other areas, the terminological unclarity is not the result of a long-standing debate but rather a symptom of the novelty of the concepts involved. Loosely speaking, entrenchment was thus measured in terms of relative frequency of naming. This is a very early example of how entrenchment and salience can be operationalized, making use of a corpus of authentic language use, and can then be employed to explain the actual choices of lexical construal that language users make.

Conclusion. The predictability of novel, context-free naming units correlates with the acceptability of their meanings to listeners/readers. Language proficiency is considered a basic skill that speakers from different language backgrounds are expected to master, independent of whether they are native or non-native speakers. In other

words, it is assumed that language users, when facing a naming unit that they have never heard/read before, prefer the interpretation which, in their view, is most acceptable. The most acceptable reading is therefore considered to be the most predictable of all those readings that come to a speaker's mind. By implication, the degree of acceptability of the individual possible readings (valued as scaled points assigned to the individual readings) may be used as an indicator of the Predictability Rate of the individual readings of a novel naming unit. At the same time, meaning predictability is influenced by a subjective factor: each language user is a unique being who perceives the world and the linguistic signs, functioning as labels for the 'objects' of extra-linguistic reality, in a unique way (certainly within the limits established by the objective factor). The interaction between the objective and the subjective factors is reflected in different scores assigned to a particular reading by different informants, on the one hand, and the overall tendency towards a particular meaning acceptable to the majority of the informants, on the other. For each novel, context-free naming unit there is one or two central meanings that are most acceptable to language users and hence most predictable. If each act of naming admits more than one possible path leading to the resulting naming unit, than the notion of meaning predictability does not imply the selection of a single 'correct' meaning. Meaning predictability is determined by both objective and subjective factors. In our case, objective factors are: novelty, intensity of usage, repetition, clarity, contrast with the other possible variants. Subjective factors stand for: interest, motives, background knowledge, routine life. The predictability of any novel naming unit heavily relies on the conceptual level analysis (i.e. supralinguistic level) and the knowledge of listeners/readers (extra-linguistic level). Therefore, experimental results for native speakers should not significantly differ from those for non-native speakers .

References:

1. Bauer, L. (2001). Morphological Productivity. Cambridge Studies in Linguistics 95. Cambridge: Cambridge University Press.

2. Cuyckens, H., Dirven R., Taylor J. R (2009). Cognitive Approaches to Lexical Semantics (Cognitive Linguistics Research [CLR] Book 23) (English Edition).

3. Dokulil, M. (1997). "The Prague School's Theoretical and Methodological Contribution to 'Word formation' (Derivology)." In Obsah – výraz – význam. Miloši Dokulilovi k 85. narozeninám (pp. 179–210). Praha: FF UK.

4. Geeraerts, D. (2002). "The Scope of Diachronic Onomasiology". Das Wort: Seine strukturelle und kulturelle Dimension. Festschrift für Oskar Reichmann zum Geburstag ed. By Vilmos Angel, Andreas Gardt, Ulrike Hass-Zumkehr & Thorsten Roelcke, 29–44. Tübingen: Max Niemeyer.

5. Geeraerts, D. (2016). Sense individuation. In Nick Riemer (ed.), The Routledge handbook of semantics, 233–247. Abingdon & New York: Routlege.

6. Geeraerts, D. (2017). Entrenchment as onomasiological salience. In H.-J. Schmid (Ed.), *Entrenchment and the psychology of language learning: How we reorganize and adapt linguistic knowledge* (pp. 153–174). American Psychological Association; De Gruyter Mouton.

7. Holmbacka, Silva, Chv´alek. Energy Storage Utilizing Hydro Pump and Battery Technologies (2012). Conference: ICCES2012

8. Štekauer, P. (1998). An Onomasiological Theory of English Word Formation . Amsterdam/Philadelphia : John Benjamins.

9. Štekauer, P. (2001a). "Fundamental Principles of an Onomasiological Theory of English Word Formation." Onomasiology Online, 2, 1–42 [www.onomasiology.de]. "Beheading the Word? Please, Stop the Execution." Folia Linguistica, 3–4, 333–355.

10. Štekauer, P. (In press 1) (2004) "On the Meaning Predictability of Novel Context-free Converted Naming Units". Linguistics.

11. Štekauer, P. (In press 2) (2004) "Onomasiological Approach to Word formation." In P. Štekauer & R. Lieber (Eds), Handbook of Word formation . Dordrecht: Springer.

12. Štekauer P., Chapman D., Cíková T., Slávka & Franko S. (2004). Word Formation as Creativity within Productivity Constraints. Sociolinguistic Evidence.

13. Štekauer, P. (2005). Meaning Predictability in Word Formation : Novel, context-free naming units, John Benjamins Publishing Company.

14. Suhr C., Nevalainen T., Taavitsainen I. (2019). From Data to Evidence in English Language Research. Language and Computers Ser. PUBLISHER BRILL PRINT PUB DATE

15. Xu, W; Martel, S; Mauch, K. (2004). An assessment of distributed generation islanding detection methods and issues for Canada. Natural Resources Canada, Varennes, PQ (Canada). CANMET Energy Technology Centre. CETC no. 2004–074; PBD: Jul 2004.