THE INFLUENCE OD SOCIOLINGUISTIC FACTORS ON PRODUCTIVITY IN WORD-FORMATION

(Introduction to research)

Lívia Demjanová, Prešov University, Slovakia

Research plan

The language background produces pressure on the productivity of the WFT (OT, MT, WFR) through which new naming units are coined.

The productivity of the WFT is influenced by sociolinguistic factors, especially by previous linguistic experience.

- > The focal points of the research: word-formation, productivity and intervening sociolinguistic factors.
- Languages considered: Slovak, Hungarian, English
- > Target groups: Hungarian-Slovak bilinguals, English-Hungarian bilinguals
- Relevant concepts: existing naming unit, potential naming unit

The basic premise

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. (Štekauer, 2003). From the moment of coining according to the productive word formation rules the naming unit is considered to be an existing naming unit. Existing naming units are in dichotomy with potential naming units. Potential naming units are defined as naming units coined in accordance to the rules of the given language that might exist, might come into existence but they have not occurred in parole yet.





A theoretical framework (points of departure) I. Specifying the position of WF



(Šteakuer, 1998)

The first point of departure in my thesis is the position of word-formation in the system of linguistic components, which is illustrated in the scheme above. It shows the direct relation between the Word-formation Component and the Lexical Component (it can serve as a basis for semantic formation), as well as between the extra-linguistic reality and the naming demands of a speech community. There is no direct connection between the syntactic component and word-formation component. Word-formation is even divided from inflectional morphology. The word-formation component is an independent component of linguistic description. The basic unit is called naming unit. Naming units are bilateral signs including meaning and form. As follows, words which cannot be analyzed into determining and determined constituents are conceived as monemes (e.g. *perceive, conceive*).

II. The Horecký's linguistic sign

The second point of departure of the thesis is the theory of linguistic sign by Horecký (1983). It is a bilateral theory advocating that the linguistic sign has two facets – signifiant, (denotative) and signifié, (designative). They are inseparable parts of one linguistic sign and their relation is arbitrary and conventional.

signifiant	phonological level (phonemes) onomatological level (morphemes) onomasiological level (base+mark)
signifié	semantic level (semes)
	conceptual level (noemes)

extra-linguistic reality

III. Štekauer's onomasiological model of WF

An onomasiological model of word-formation includes the following levels (Štekauer 1998):

- 1. Extra-linguistic reality
- 2. Conceptual level
- 3. Semantic level
- 4. Onomasiological level
- 5. Onomatological level
- 6. Phonological level

The starting point of the onomasiological theory of word-formation is the linguistic demand of a speech community to name an object of the extra-linguistic reality. To denominate the object, it has to be analyzed. This step is done at the conceptual level in the form of a logical spectrum delimiting the object by means of logical predicates (noems). In the same time, the conceptual level uses the conceptual categories (SUBSTANCE, ACTION, QUALITY, CONCOMITANT CIRCUMSTANCE). Logical predicates present the supralinguistic level and are caught by semes at the semantic level. The semes construct the semantic structure of the linguistic sign. At the onomasiological level one of the semes is chosen to denote a class, gender etc. to which the object belongs and it is the so-called onomasiological base. The other seme functions as an onomasiological mark. The onomasiological mark can be divided into determining constituent and determined constituent. It specifies the base. The onomasiological base and mark are connected by the onomasiological connective that represents the logical-semantic relations between the onomasiological base and mark. The base, the connective and the mark form the onomasiological structure (Dokulil, 1966). They are linguistically expressed by wordformation bases or affixes at the onomatological level and the final shape of the naming unit is cut at the phonological level.

According to Štekauer (1998) there are five onomasiological types in English word-formation:

- 1. Onomasiological type I Complete Complex Structure all three members of the onomasiological structure are expressed, e.g. *language teacher*.
- 2. Onomasiological type II Incomplete Complex Structure R the determining constituent of the onomasiological mark is left unexpressed, e.g. *teacher*.
- 3. Onomasiological type III Incomplete Complex Structure L the determined constituent of the onomasiological mark is not expressed, e.g. *policeman*.

- 4. Onomasiological type IV Simple Structure the onomasiological mark cannot be analyzed into the determining and determined elements, e.g. *blackboard*.
- 5. Onomasiological type V Onomasiological Recategorization covers the process of conversion and the basic features are conceptual recategorization, unanalysable onomasiological level, change of word-class, close semantic affinity between conversion pair members, phonematic/orthographic identity of fundamental forms, change of paradigmatic and syntagmatic relations at the system level (langue) (Štekauer, 1998).

IV. Productivity in WF

Lexicon is one of the most dynamic components of the language system. It reflects the changes in the social conditions of a society. On the other hand, the field of word-formation is considered to be one of the most controversial linguistic areas at all and the question of productivity still remains "... one of the central mysteries of derivational morphology" (Aronoff, 1976:35).

There are two basic approaches to the dealing with productivity:

- qualitative (Dressler-Ladanyi)
- quantitative (Baayen)

One of the essential questions that should be answered at the early beginning of each study dealing with productivity was asked by Bauer (2001) – what is productive? The linguists have replied in various ways:

- affixes (Fleischer)
- rules (Aronoff)
- words (Saussure)
- Dokulil:
 - the productivity of the word-formation formant (affix)
 - the productivity of a word-formation type (WFT); a WFT functions as a pattern for forming new words
 - the productivity of a word-formation base

The approach applied in the research was developed by Štekauer (2003). He distinguished 4 levels of productivity:

1. the productivity at the level of Onomasiological Types (OT) – there are five Onomasiological Types; they are based on the criterion of which constituents of the onomasiological structure are linguistically expressed at the onomatological structure. The productivity of an OT can be counted as a ratio of all naming units coined according to this OT and the total number of naming units belonging to the given conceptual category (Agent, Instrument, Action, etc.)

 \sum NUs belonging to the given OT

------ x 100

 \sum NUS belonging to the given conceptual category

2. the productivity at the level of Word-Formation Types – WFT is defined by Dokulil (1962) as a unity of onomasiological structure, lexical-grammmatical nature of WF base (deverbatives, desubstantives,...) and formants (affixes, e.g. -*er*) – the calculation is related to the conceptual categories, such as Agent, Instrument, Location, etc. It follows that the computation of the productivity of a WFT depends on the onomasiological structure. Different onomasiological structures represent various WF Types. Naming units falling within one and the same particular conceptual category represent a single Word-Formation Type Cluster (WFTC), e.g. all WFT forming Agents (conceptual category) fall into one WFT Cluster. Any WFTC is – with regard

to the particular conceptual theory -100% productive; the productivity of the individual WF Types is computed within WFTC as a ratio of the number of NUs coined within the individual WF Types and the total number of NUs belonging to the given WFTC.

 \sum NUs coined according to the given WFT

----- x 100

 \sum NUs belonging to the given WFTC

3. the productivity at the level of Morphological Types – each WF Type can have various morphological representations (*teacher*=V+er). Different morphological structures represent various Morphological Types. MT coining NUs falling within one and the same conceptual category represent a Morphological Type Cluster (MTC). Any MTC is – with regard to the particular WFTC – 100% productive, and the productivity of the individual Morphological Types can be counted within the particular MTC as a ratio of the individual morphological types and the total number of NUs belonging to the given MTC.

 \sum NUs coined according to the given MT

----- x 100

 \sum NUs belonging to the given MTC

4. the productivity at the level of Word-Formation Rules – they are constituted by the unity of WF Types and Morphological Types. From the definition of the WF Type follows that a WFR is constituted by the unity of the onomasiological and onomatological structures. Thus, the productivity of WFR is determined by the productivity of WF Types and M types.

Research

The research itself is based on a questionnaire divided into two parts. The aim of the first part is to gain a corpus of new motivated naming units which have not existed in the language before. The second part surveys the sociolinguistic data.

There are four different tasks in the first part of the questionnaire. The initial one is made up of four subtasks. Each subtask describes an Agent and the respondents are provided with some possible naming units and they are asked to choose one of them. E.g. *A person dependent on phoning:*

a) Phoner

- b) Phonnik
- c) Phonist
- d) Phonant

- e) Phoner
- *f) Phone-obsesee*
- g) Phone-obsessive
- h) Phoneman

In the second task the respondents are asked to name people and objects in various situations. They are motivated by simple sentences as e.g. *Terrorist attacks carried out by computers*. The instruction in the third task is the same as in the second but the motivation is different – the respondents are not motivated by sentences but pictures, e.g.



The last, fourth task combines a description of a non-existing sport game with a layout of its playing field. The respondents are invited to name the game and the players. The gained corpus of naming units will be analyzed and the four levels of productivity will be counted.

The second part of the questionnaire gathers sociolinguistic data that represent sociolinguistic factors. In the following analysis these are divided into two groups – vertical and horizontal. The vertical factors are age, gender, education and occupation. The respondents are grouped according to their generation, gender, type of education and professional orientation. The horizontal factor represents the previous linguistic experience; to gain information about it the questionnaire asks for the language background of the respondent. The respondents are asked to evaluate the level of the language knowledge. To develop a more complete picture about the respondent's language background, the last item adds the information about the frequency of languages spoken at respondent's home. According to these data the respondents will be classified on the base of morphological classification of languages. The gained data will be stratified and classified and a correlation between the productivity of different WFT (OT, MT, WFR) will be stated.

Research methodology

The research procedure consists of the following steps:

- 1. creation of the questionnaire,
- 2. dissemination of the questionnaire
- 3. analysis of the corpus of new naming units, computation of the productivity of WFT (OT, MT, WFR),
- 4. analysis of the vertical and horizontal sociolinguistic factors,
- 5. correlation of the productivity and sociolinguistic factors.

The target group of the respondents

The respondents of the questionnaire are bilingual individuals. There are two groups of them – Slovak-Hungarian bilinguals and English-Hungarian bilinguals. The questionnaire exists in two language versions – Slovak and English. I consider individuals to be bilingual if they gained at least two languages in natural environment (e.g. family, migration), not by education.

Legend:

OT – onomasiological type NU – naming unit WF – word-formation WFR – word-formation rule WFT – word-formation type WFTC – word-formation type cluster MT – morphological type MTC – morphological type cluster

References:

ARONOFF, M. 1983. *Word Formation in Generative Grammar*. Cambridge: MA:MIT Press, 1983.

BAAYEN, R.H. 1993. *On Frequency, Transparency, and Productivity*. In: *Yearbook of Morphology*. Eds. G. Booij and J.van Marle. Dordrecht: Kluwer, 1993, pp. 181-208.

BAAYEN, R.H. – LIEBER, R. 1991. *Productivity and English Derivation: a corpus-based study*. In: Linguistics 29, 1991, pp. 801-804.

BAUER, L. 2001. Morphological Productivity. Cambridge: CUP, 2001.

DOKULIL, M. 1962. *Tvoření slov v češtine*. Praha: Nakladatelství československé akademie, 1962.

DRESSLER, W. - LADÁNYI, M. 2000. *Productivity in word-formation: a morphological approach*. In: Acta Linguistica Hungarica 47, 2000, pp. 143-144.

FLEISCHER, W. 1975. Wortbildung der deutschen Gegenwartsprache. Tübingen: Niemeyer, 1975.

HORECKÝ, J. 1983. Vývin a teória jazyka. Bratislava: SPN, 1983.

ŠTEKAUER, P. 1998. An Onomasiological Theory of English Word-Formation. Amsterdam/Philadelphia: John Benjamins, 1998.

ŠTEKAUER, P. 2003. On some issues of an onomasiological approach to productivity. In: Ranam 36, 93-96, 2003

This article is part of VEGA project No. 1/3714/06.