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NAMING TARGETS AS THE SPHERE OF INTERACTION OF SEMANTIC TRANSFER AND WORD FORMATION

THEORETICAL OUTLINES

The continuous interaction of man with the environment, the eternal enrichment of knowledge about various elements of reality, constantly causes the diverse naming needs of a speaker. There are four basic ways of naming at the speakers' disposal – imitation, borrowing of words, semantic transfer, and word formation. Generally, the naming process is guided by “the cognitive analysis of the content to be represented” (Kharitonchik 2010: 310), but in borrowing this analysis is carried out in the source language and followed by adoption into the recipient language. In contrast to that, other naming ways work within a single language, and their results are motivated words some of whose properties are caused by the linguistic source, i.e. its form and/or content (Heine 1997: 3; Radden and Panther 2004: 4). Since “it is convenient and natural to fix the new knowledge by means of already known images” (Kubryakova 2004: 135), motivated words are “easier to learn, remember and use” (Lakoff 1987: 438). This strategy of a speaker, to refer to well-known concepts (Feilke 1996: 66), absolutely justified from the cognitive point of view, and therefore to use well-known names, can be considered as the major principle of the naming process.

Serving the common purpose of the representation of knowledge, semantic transfer and word formation, being the leading naming ways, are different in formal aspects (cf. intraword character of semantic transfer and transpositional properties of word formation). However, they are

closely related in nature – sources used, naming targets, cognitive relationships between sources and targets – which determines their close interaction.

This study is concerned with one of their common aspects – targets named either by motivated secondary meanings or derived¹ words and compounds. The aim of the research is to establish the interaction of semantic transfer and word formation on the basis of their naming targets, i.e. to find out whether these naming processes are oriented towards identical or different onomasiological tasks.

METHODOLOGY AND RESEARCH

This pilot study focuses on the German words motivated by a group of underlying bases – primary (i.e. simplex), most frequent nouns that denote body parts and belong to the lexical core of a language (Abayev 1949: 16; Balassa 1951: 13–14). These bases are actively employed in the processes of semantic transfer and word formation; hence their secondary meanings, derived words and compounds can provide extensive data for the research.

To find secondary meanings of body part names “Duden – Das große Wörterbuch der deutschen Sprache” (2012) was used and, additionally, terminological dictionaries which specialize in different branches of knowledge. “Das Wortfamilienwörterbuch”, edited by J. Splett, where terms are represented in word families, helped to find all the possible derived forms and compounds coined from a certain underlying base. In this study I concentrate on naming targets formed by one derivational step² only, as further derivation might lead astray from the goal of the research.

¹ In the paper I use the term derivation in the narrower sense as a means of word formation that exploits one stem, in contrast to composition, where two or more stems are involved (Smirnitsky 1998: 70; Dokulil 1994: 137). I also take into account the borderline cases of “Zusammenbildung” (derivational compounds) when composition is accompanied by suffixation: *der Vierbeiner* ‘quadruped’. Since these stems do not form a compound without the assistance of suffixes, I consider them as derived words (Stepanova 2003: 114).

² The derivational step is considered as each operation in an abstract system of derivation which ends up in the new naming unit (Soboleva 1971: 169). Apparently, the notion of this operation, introduced in the researches of word formation, can also be applied to the process of the semantic transfer that results in polysemy.

As mentioned above, transposition, being specific to word formation, changes the syntactic function of a word (Kurylowicz 1936, here cited after Kurylowicz 2000: 9–11) (e.g. *haarig* 'hairy', *köpfen* 'behead') and illustrates the distinction between semantic transfer and word formation at the level of the word classes their results belong to. Further investigation may possibly lie within the limits of nouns, as this lexico-grammatical class is shared by coinages of both types and serves as a comparison basis.

Taking into account this limitation, the corpus of the analyzed units consists of 130 secondary meanings of body part names and 1265 substantive derived words and compounds to be analyzed.

To identify the naming targets I relied on the semantic differentiation which determines a variety of lexical categories, i.e. lexico-semantic groups. The percentages of units of both types that belong to various lexical categories are represented by the diagram below³.

The results of the study suggest the following conclusions concerning the naming targets of both naming ways, which address identical sources.

1. IDENTITY AND DIFFERENCE OF TARGET AREAS

Naming the targets of word formation reveals a higher diversity in contrast to those of semantic transfer (15 vs. 8 lexico-semantic groups). Among lexico-semantic groups shared by both naming ways are: **"Body parts"**⁴ (*der Hals* 'cervix', 'tonsils', *die Brust* 'bust', 'respiratory apparatus' – *das Näschen* 'little nose', *das Beinwerk* 'legs', *das Trinkerherz* 'heart with pathologies determined by alcohol abuse', *die Hakennase* 'a hooked, beaked nose'), **"Artifacts and their parts"** (*der Hals* 'neck of a bottle', *das Herz* (techn.) 'core' – *der Fäustling* 'mitten', *das Zahnpulver* 'tooth-

³ One hundred per cent are considered all results of a particular naming way – secondary meanings or derived words and compounds. The percentages within each naming way show its tendency to provide names for certain target areas. Of course, another approach could be possible when within each lexico-semantic group the rates of coinages of both types are measured. But considering a substantial difference between the results of semantic transfer and those of word formation (130 vs. 1265) these measurements would not be very illustrative as in every group derived words and compounds would prevail.

⁴ What should be specifically emphasized is that the semantic component "part" is represented in the great number of targets which can be determined by its active use as a motivating link in the naming process.

powder'), "**Actions**" (*die Hand* '(football) handball', '(boxing) conk, punch' – *der Handel* 'a conflict with manhandling', *das Zähneputzen* 'brush teeth'), "**Persons**" (*das Herz* 'lover, dear', *der Kopf* 'person of certain intellectual abilities' – *der Zahntechniker* 'dental technician', *der Augenarzt* 'oculist'), "**Space**" (*das Auge* (math.) 'center of perspectivity' – *der Beinraum* '(enough) space for the legs', *die Rückenlinie* 'contour of the back'), "**Plants and their parts**" (*das Auge* '(bot.) bud', *das Haar* '(bot.) trichoma' – *das Sonnenauge* 'plant similar to sunflower with pale blue flowers', *der Zahntrost* 'odontites (a plant that decreases toothache)'), "**Natural objects and their parts**" (*der Rücken* 'chain of mountains', *der Hals* 'narrow part of a riverbed' – *der Rückenwind* 'wind that blows at the back'), "**Mental entities**" (*das Herz* 'soul', *der Kopf* 'intellect, will, memory' – *die Augendiagnose* 'method of diagnosis that is based on the examination of the iris') (compare the study of A. Lundysheva on the basis of English and Russian slang, where both naming ways have a common target area, "Persons", and interact within it: Lundysheva 2015: 47–58).

Working within the same lexical category, semantic transfer and word formation reveal different degrees of activity, e.g. the naming units of the group "Body parts" are represented by 39.5% of derived words and compounds and only by 12% of all secondary meanings. In contrast to that, semantic transfer tends to provide most names for the target area "Artifacts and their parts", while word formation shows a lower activity in this group (68.5% and 27%, respectively). A similar tendency is observed in other groups: "Actions" (1.5% of secondary meanings and 5% of derived words and compounds), "Persons" (1.5% and 3%), "Plants and their parts" (5% and 0.3%), "Natural objects and their parts" (9% and 0.3%), "Mental entities" (1.5% and 0.1%). Both naming ways show an almost equal activity only in the target group "Space" (1% and 1.1%, respectively).

Specific to word formation are the following onomasiological tasks: "**Physical condition and properties**" (*der Herzanfall* 'heart attack', *der Zahnausfall* 'dedentition'), "**Social phenomena**" (*das Handspiel* '(in football) hand ball', *die Mundpropaganda* 'verbal propaganda'), "**Living organisms**" (*die Kopflaus* 'head louse', *das Handpferd* 'outrunner, side horse'), "**Movements**" (*der Fingerwechsel* 'change of fingers while playing a musical instrument', *der Kopfsprung* 'headfirst dive'), "**Organizations, institutions**" (*die Augenklinik* 'eye clinic', *das Zahnlabor* 'dental laboratory'), "**Time**" (*die Fußminute* 'a period of approx. one minute during which a certain distance

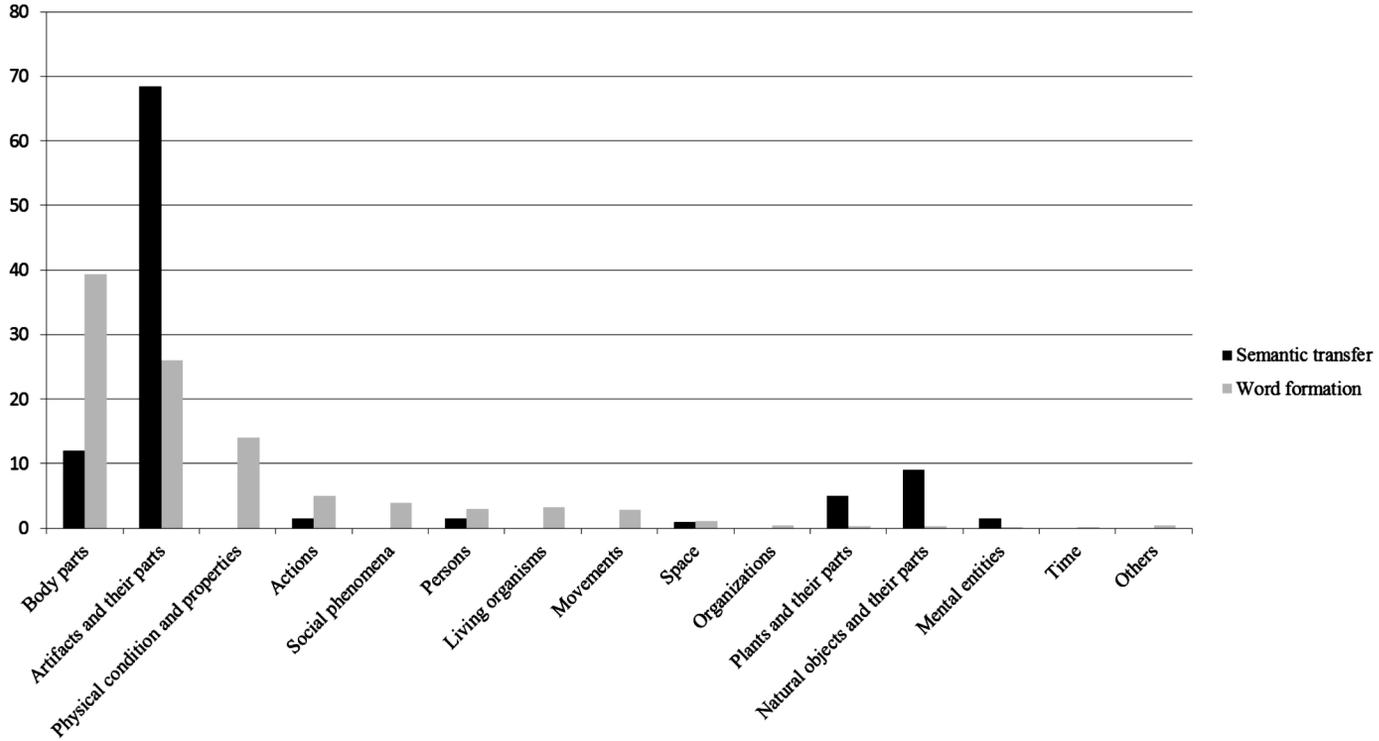


FIGURE 1. The Naming Targets of Semantic Transfer and Word Formation (from German most frequent body part names)

can be covered on foot', *die Handzeit* 'time measured by a stop-watch'), "Others"⁵ (*der Augenschmaus* 'feast for the eyes', *der Fingerabdruck* 'fingerprint'). To a large extent, this diversity can be accounted for by the use of a body part name in composition as the first component that can be combined with nouns of different lexical categories. These nouns being the second element of a compound determine the lexical category of the whole word: *die Propaganda* 'propaganda' (social phenomenon) – *die Mundpropaganda* 'verbal propaganda', *der Sprung* 'jump' (movement) – *der Kopfsprung* 'headfirst dive'.

2. FUNCTIONS OF SEMANTIC TRANSFER AND WORD FORMATION WITHIN COMMON TARGET AREAS

The study shows that though more than half of the naming targets are common for both of the naming ways under consideration, within one lexico-semantic group semantic transfer and word formation have different functions. Word formation regularly modifies⁶ entities by means of affixation and composition. Semantic transfer is not capable of modification but can use the same word in order to name objects from diverse categories.

These different functions can be illustrated on the basis of the naming target "Artifacts and their parts". The units in this group produced by means of word formation clearly demonstrate the specifying role of the body part names, i.e. they do not name an artifact but can only modify it: *die Kopfbedeckung* 'head-dress', *das Schulterpolster* 'shoulder pad', *die Augenbinde* 'blindfold', etc. Conversely, by means of semantic transfer other

⁵ This group is formed as a residual and includes words that could not be assigned to other lexico-semantic groups.

⁶ There are two interpretations of the term "modification". In Slavic linguistics modification is traditionally treated as the relation between the source and target when "the content of a given concept acquires a supplementary modifying mark [feature]" (Dokulil 1962: 229, here cited after the English summary pp. 220–250). According to this, the results of modification are diminutives, augmentatives, collectives, pejoratives, marking degrees (intensification), etc. mostly represented by derived words. In German word formation theory modification is considered in a wider sense of the term when one element determines or specifies another (Eichinger 2000: 38; Donalies 2005: 58; Fleischer 2012: 11), thus, modification can be found not only in derivation (including diminutive, augmentative, collective, etc. meanings), but also in composition: "we consider compounds as the most advanced way to create new nouns by means of the modification of nominal concepts" (Motsch 2004: 376).

objects are referred to by the same names: *der Arm* (techn.) 'lever', *das Bein* 'car wheels', *der Hals* 'neck of a bottle'.

Another example that represents the distinction between the specific functions of semantic transfer and word formation is the naming target "Body parts" that reveals their heterogeneous character. In word formation, body part names are either modified (*das Köpfchen* 'little head', *das Beinwerk* 'legs', *das Mandelauge* 'almond-shaped eye', *der Paddelfuß* (slang) 'flipper (extremely big foot)') or, again, act as modifiers: *das Nasenbein* 'nasal bone', *der Fingerknochen* 'phalanx'. Due to semantic transfer, referring to other body parts is possible: *der Arm* (zool.) 'tentacle', *die Brust* 'bust', *der Hals* 'cervix', *der Rücken* (anat.) 'spinal column'. Thus, derived word and compounds denote the same body part as the underlying base, while semantic transfer, again, provides names for other body parts.

3. SEMANTIC TRANSFER IN WORD FORMATION

When word formation is accompanied by metonymy or by metaphor, the interaction of both naming ways described above becomes most obvious. As semantic transfer can combine both with derivation and composition, there are four basic types:

– derivation + metonymy, e.g. *das Bein* 'leg' – *der Beinling* 'trouser-leg', *die Faust* 'fist' – *der Fäustling* 'mitten' (ENTITY FOR ADJACENT ENTITY (Janda 2011: 372; also see E. Seebold 1989: XXII);

– derivation + metaphor, e.g. *der Fäustling* 'block of rock that has the approximate size of a fist' (the relationship between two entities based on their resemblance).

In these words the suffix *-ling*, which means 'an object', performs the role of an onomasiological base, and the stems *der Finger*, *die Faust* are onomasiological marks⁷ and name either the body part the object is located on, or compare an object with a body part.

– composition + metonymy, when the names of body parts act as the second element of a *bahuvrihi* where the relation *pars pro toto* is realized: the coinage denotes not a body part but stands for the whole –

⁷ The terms "onomasiological base", "onomasiological mark" and "onomasiological connective" were introduced by M. Dokulil and are actively used in investigations of word formation: see the works of E.S. Kubryakova, V.G. Gak, N.A. Slyusareva, Z.A. Khari-tonchik, P. Štekauer et. al.

the person or an animal, e.g.: *der Silberrücken* 'an old male gorilla, silver-back', *der Dickkopf* '(coll.) mule, pighead' (lit. 'thick head'), *der Schreihals* 'squaller' (lit. 'screaming neck'). Quite a special case comprises names of persons or animals coined by means of composition and derivation (see the footnote 1): *der Tausendfüßler* 'myriapoda', *der Vierbeiner* 'quadruped'. Suchlike compounds of a metonymic character are based on modification when a salient feature of a person or of a living organism is highlighted, but also on an attribution of this feature to a person or an animal: *das Langbein* 'person with long legs'.

In compounds, the name of a body part also acts in other types of metonymy (in addition to *pars pro toto* mentioned above): the modification is accompanied by the contiguity relationship: *der Fußabstreicher* 'door scraper' (lit. 'foot scraper'), where not feet are meant but boots (ENTITY FOR ADJACENT ENTITY); *der Augenmensch* 'a person of prevailing visual perception abilities', where the function of an eye 'to see' is highlighted (ENTITY FOR ACTION).

– composition + metaphor: the whole word can be metaphorized: *das Rehauge* 'big brown eye' (lit. 'eye of a deer') or only one component of it: *der Kopfbahnhof* 'terminus – railway station at the terminal station' (lit. 'head railway station'). In the first example the metaphorization comes after word formation: not every eye is as big and brown as a deer eye. Moreover, this term can also be interpreted in the direct meaning ('eye of an eagle'). Compare with analogous words given in the dictionary: *das Fischeauge* 'eye of a fish', *das Kinderauge* 'eye of a child', *das Luchsauge* 'eye of a lynx'. In fact, words like *das Rehauge* are the results of two successive operations and are not included in the further study since the source name is not metaphorized but the whole compound. In the second example the body part name acquires metaphorical meaning acting in a compound, i.e. semantic transfer and word formation work **simultaneously**: *der Haarriss* 'hairline crack, micro crack', where the fine diameter of a hair becomes the cognitive base for the production of the meaning 'very fine, micro'. Among the results of semantic transfer created from the word *das Haar* there is no identical secondary meaning which confirms the simultaneous use of both naming ways.

Suchlike interaction, when a body part name is exploited by semantic transfer as well as by word formation, is observed in the following naming targets: "Artifacts and their parts" (*der Beinling* 'trouser-leg'), "Persons" (*der Schreihals* 'squaller'), "Living organisms" (*der Silberrücken* 'an old male

gorilla, silverback'), "Natural objects and their parts" (*der Fäustling* 'block of rock that has the approximate size of a fist'), "Others" (*der Haarriss* 'hairline crack, micro crack'). In contrast to word formation used singly, the combination of two naming ways can accomplish other functions, like the naming of living organisms or persons by means of their salient features, characterizing persons by their behavior; artifacts and natural objects by their size. On the other hand, in this interaction a body part name acquires secondary meanings that it does not have in semantic transfer used in isolation: *der Hals* *'person', *der Fuß* *'boot', *die Faust* *'smth. that has the size of a fist'. The simultaneous use of semantic transfer and word formation within the same coinage expands their naming capacities.

CONCLUSIONS

1. Using identical sources, semantic transfer and word formation can provide names for the same lexico-semantic groups – although with a different degree of activity. In contrast to semantic transfer, word formation can also accomplish specific naming tasks. A greater number of its targets is due to a large extent to the use of a body part name in compounds as the first component while the lexical category of the whole word depends as a rule on the second element, which can vary.

2. Within the same lexico-semantic group both naming ways perform different functions: word formation regularly uses a body part name as a modified unit or as a modifier. In semantic transfer, objects of diverse lexico-semantic groups are referred to by body part names. Therefore, the interaction between semantic transfer and word formation in the naming process is represented by their different functions.

3. Semantic transfer and word formation are not only capable of acting singly. The most vivid evidence of the complementary character of these naming ways is the joint realization of their functions within the same coinage, and the accomplishment of specific onomasiological tasks.

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Summary

Semantic transfer and word formation both use the already existing lexical units as naming sources in order to react adequately to the diverse naming demands of the language user. The research aims to answer the question about the distribution of onomasiological targets between semantic transfer and word formation produced from the most frequent German body part terms. The interaction of semantic transfer and word formation manifests in different lexical categories that become the result of naming processes. Moreover, word formation, due to the dominating status of composition in German, reveals a higher diversity of naming targets than semantic transfer does. Both naming ways can also interact while producing the same word, when word formation is accompanied by semantic transfer. The interaction of these naming ways in the sphere of targets is of a complimentary nature.

Key words: word formation, semantic transfer, naming targets, interaction, distribution

WYTWORY NAZEWNICZE JAKO SFERA INTERAKCJI TRANSFERU SEMANTYCZNEGO I METOD SŁOWOTWÓRCZYCH

Streszczenie

Zarówno transfer semantyczny jak i metody słowotwórcze wykorzystują już istniejące elementy leksykalne jako źródła nazewnictwa, umożliwiając tym samym odpowiednią reakcję na różne potrzeby użytkownika języka pojawiające się w tym zakresie. Niniejsze badanie ma na celu odpowiedź na pytanie o podział celów onomazjologicznych pomiędzy transfer semantyczny

a metody słotwórcze na bazie najczęściej używanych nazw części ciała w języku niemieckim. Interakcja pomiędzy transferem semantycznym a metodami słotwórczymi znajduje swój wyraz w rozmaitych kategoriach, będących rezultatem procesów nazewnictwa. Co więcej, metody słotwórcze, z racji ich dominującego statusu w kompozycji niemieckiej, wykazują się większą różnorodnością wytworów nazewniczych niż transfer semantyczny. Oba sposoby nazewnictwa mogą też pozostać ze sobą w interakcji, prowadząc do powstania tego samego słowa wówczas, gdy metodom słotwórczym towarzyszy transfer semantyczny. Interakcja wspomnianych sposobów tworzenia nazw w sferze wytworów nazewniczych jest komplementarna.

Słowa kluczowe: metody słotwórcze, transfer semantyczny, wytwory nazewnicze, interakcja, podział