TOWARDS A TYPOLOGY OF SEMANTIC DERIVATION MODELS:
A CASE OF MENTAL ENGROSSMENT VOCABULARY IN ENGLISH AND POLISH

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The paper focuses on the semantic derivation models of mental engrossment vocabulary – a semantic class of words that denote the mental state of a person absorbed (lost, buried, plunged, etc.) in thought, memories, dreams, etc. The study shows the characteristics of the development of a mental engrossment vocabulary semantic paradigm from a cross-linguistic perspective and reveals the semantic derivation models of engrossment adjectives in the English and Polish languages. Semantic derivation modelling provided in the paper proceeds from the assumption that the development of a linguistic item semantic paradigm is realised simultaneously with a situation concept extension. The extension of the concept is supposed to be determined by the changes the participants undergo within the source-to-target-situations transitions (shifts). The participants of the source situation may change their role, referential, communicative, taxonomic or deictic characteristics as compared to those in the target one. The changes determine the types (models) of derivational strategies that underlie the development of a linguistic item's semantic paradigm. The semantic development construed by the English and Polish engrossment adjectives suggests the regular way of a concept extension – from the internal domain (the situation of mental engrossment) towards the external domains (the situations of identification, association, evaluation, etc.). The study concludes that engrossment adjectives in English and Polish may apply to the actantial (based on the increase of the situation participants), implicative (based on the implications of the situation participants' changes) and categorical (based on the situation participants' taxonomic class specifications) models of semantic derivation.

Keywords: semantic derivation; model; mental engrossment; cross-linguistic; concept of situation; participant.

Introduction

Contemporary linguistic semantics frequently presupposes the priority of a cognitive approach when modelling the semantics of a linguistic item (Schally, 2004; Mitchell, Lapata, 2010; Millrood, 2014; Mel'čuk, 2015; Mukhtarullina et al., 2015, etc.). Semantics modelling is thought to reveal not only the conceptual entities that underlie the contents of a linguistic item or a class of linguistic items but also those areas of language cognition that represent the national worldview, the specificities of ethnic mentality, and the characteristics of cognitive abilities which belong to different linguistic communities (Goddard, 2008; Narrog, 2012; Brychcín, Konopik, 2015, etc.). From this perspective, semantics modelling acquires significance for cross-linguistic (either contrastive or typological) studies, as it offers methods to decipher the peculiar manners in which the semantics of a linguistic item encodes and distributes information on a certain state of affairs in both related and non-related languages.

This approach declares the necessity and expediency to model the content of a linguistic item through a sampling of a multidimensional situation concept intended to represent the way a certain situation or its fragment is conceptualised. The conceptualisation suggests the dynamic schematisation of the real or imaginary world, with one of its fragments being foregrounded and focused upon, while the others are backgrounded and defocused (Irishanova, 2014). The dynamic approach towards a linguistic item's semantics modelling exposes and elaborates upon the system of semantic derivation models – theoretical constructs that represent the dynamic potential of a linguistic item, claiming various types of semantic associations that underlie the development of a linguistic item's semantic paradigm, cf.: colexification (François, 2008), semantic parallels (Koch, 2008), semantic affinities (Pottier, 2008), etc. From a cross-linguistic perspective, the semantic derivation modelling is supposed to reveal the similarities and differences in the ways the semantic paradigms of linguistic items develop in the contrasted languages (see Panther, Thornburg, 1999; Usonienė, 2003; Ponterotto, 2010; Srinivasan, Rabagliati, 2015).

The studies of semantic derivation aim at describing the types of semantic shifts that represent "variation of meaning of a given word, be it synchronic or diachronic, i.e., the relation between two different meanings of a polysemous word or the relation between two meanings of a word in the course of semantic evolution" (Zalizniak, 2008, p. 217). From this viewpoint, it is not substantial whether semantic derivation is considered within Kurylowicz's schema (the assumption that the particular meanings derive from the core one) or Jackobson's (the assumption that the particular meanings derive from the invariant one). It is essential to reveal and establish the general cognitive mechanisms that underlie the linguistic items' semantic derivation strategies. This premise makes it expedient to introduce the notion of a conceptual schema intended to ensure the semantic unity of a polysemous word, representing its various meanings as an entity (a single whole). "The meaning that a word has in a concrete use is the resultant of twofold operations on the constituents composing its conceptual schema: on the one hand, it is the selection of the most important

semantic components and their arrangement in accordance with their communicative status (presumption, assertion, implication, etc.); on the other hand, it is the reinterpretation of the selected components motivated by changes in the taxonomic class of the arguements. The interaction between these operations produces a concrete set of semantic derivation rules which generate (more or less regular) polysemy" (Zalizniak, 2007, p. 118). Such an approach correlates with the idea of semantic derivation systematicity, which provides for establishing the characteristics of linguistic items' semantic potential, and the dynamics of their semantic paradigm development.

In order to substantiate the ways the languages (English and Polish) construe the development of linguistic items' semantic paradigms, we will resort to the ***mental engrossment vocabulary*** (hereafter *engrossment words*) – a semantic class of words that denote the mental state of a person absorbed (lost, buried, plunged, etc.) in thought, memories, dreams, etc., cf.: *sink* "to be absorbed in thought": *He pursued his way through the woods sunk in deep thought*; *pogrążać się* "całkowicie oddawać się jakiejś myśli lub stanowi": *Czekam, aż myśl, jak łódka wirami kręcona, zbłąka się i na chwilę w niepamięć pogrąży*.

Engrossment words in English and Polish may designate:

a) the state of being engaged in thought, cf.: *pensive*, *thoughtful*, *dreamy*; *zadumany*, *zamyślony*, *skupiony*, *marzący*, etc.;

b) the state of being engaged in thinking, cf.: *meditate*, *muse*, *ponder*; *zamyślać się*, *pogrążać się*, *zagłębiać się*, *zatapiać się*, etc.;

c) the state of engaging (occupying) an object of thought (the attention, mind, faculties, etc.), cf.: *absorb*, *engross*, *devour*, *occupy*; *absorbować*, *pochłaniać*, *rozmarzyć*, etc.

The study of mental engrossment vocabulary aimed to reveal the ways a person's inner world is construed by language. The subjects of the analyses were the metaphorical transferences of the verbs that encode information on the relations between the situation of mental engrossment and of those of perception, movement, swimming (see Zaliznjak, 2006, Bragina, 2007, Rahilina, 2007). Upon that, the situation of mental engrossment was considered as the result of the perception / physical situations concept extension.

It is not without reason, however, that engrossment vocabulary has its own derivational potential. The study of the potential will afford ground for revealing the types (models) of shifts that underlie the semantic structure of engrossment vocabulary. It is efficient to elaborate the models from a cross-linguistic perspective, as it may help establish not only the specific features of engrossment words semantic development in the contrasted languages but also to reveal the ways the category of mental engrossment evolves in the English and Polish linguistic communities.

Methodological Background

We claim the MODEL OF SITUATION to be the basis for comparison (*tertium comparationis*) of a linguistic item's semantic derivation. As a metalanguage construct, the MODEL OF SITUATION reveals the features of a polycentric model (see, e.g., Taylor, 1995, p. 99) that represents the meaning of a linguistic item as a set of alternative, hierarchically established semantic dimensions. This agrees with the assumptions about a multidimensional nature of cognition modelling (Multidimensional models, 1992), as well as with the theoretical premises on how multidimensional situations are modelled (Therriault, Rinck, 2007). We find it expedient to use this type of model, reasoning from the hypothesis that language semantics reflects the results of situation conceptualisation as "conception of something which can be the case in some world" (Dik, 1997, p. 105). From this perspective, the MODEL OF SITUATION is considered as a standard that represents the content of a linguistic item as a sample of a multidimensional concept, encoding information on how a situation is construed by a designator. It is worth noting that what is meant here is by no means a real-world situation: "It is a state of affairs strictly as it is portrayed by the language L and as it is reflected in the possible uses of L. It is a linguistic situation, not a psychologically, logically or pragmatically defined one. It is a complex fact – a set of facts and entities linked by semantic dependency relations into a unified structure that is denoted by the predicate 'L'" (Mel'čuk, 2015, p. 12).

It is posited that a situation is construed based on the conceptualisation strategies a designator resorts to in his / her "elaborating" (identifying, estimating, associating, etc.) the situation (the participants and their relations). Each strategy determines the resultant configuration of a situation concept, revealing various aspects (characteristics) of the participants: their gnoseological status, the nature of their relationships, the degree of their positional activities, the associations established between them, etc.

A semantic derivation modelling, provided in this paper, proceeds from the assumption that the development of a linguistic item's semantic paradigm is realised simultaneously with a situation concept extension. The extension of the concept is supposed to be determined by changes the participants undergo within the source-to-target-situations transitions (shifts): the participants of a source situation may change

their role, referential, communicative, taxonomic or deictic characteristics in comparison to those in a target one. The changes in the participants' characteristics determine the type (model) of a derivational strategy that underlies the development of a linguistic item's semantic paradigm.

Results and Discussion

The prerequisites above afford ground for singling out four models of semantic derivation:

– the converse model represents a shift-in-focusing strategy, i.e. the redistribution of the focus of attention from one participant onto another in the way of a diathetic shift that advances one participant in ranking and demotes the other;

– the actantial model is reduced to the transformations in the structure, type or reference of the situation participants. Such transformations may provide: (a) increase or decrease of obligatory participants in the target situation; (b) change of a participant's type (semantic role); (c) change of a participant's referential status or deictic characteristics;

– the implicative model is reduced to the implications, i.e. the additional information about the changes (effects) the participants may undergo;

– the categorical model is reduced to the participants' taxonomic class specifications, stipulating changes in the time schemata (taxonomic category).

The analysis of semantic derivation of the engrossment words covers two stages: firstly, the elaboration of a prototype situation model (the model is devised on a set of common semantic components that are claimed to constitute a semantic class of words (see Rozina, 2005, p. 117); secondly, the modelling of the semantic derivation strategies in the contrasted languages.

The model of prototype situation of engrossment vocabulary

The model of a prototype situation (the state of mental engrossment) is represented by such common semantic components:

1) mental engrossment suggests the concentration of the Experiencer on the Stimulus. The Stimulus might correlate with the content of a mental object, cf.: *Absorbed in his thoughts, he stumbled on. Pogrążyć się w myślach, w zadumie*; a physical object or activity, cf.: *I only postponed it because I happened to get absorbed in a book. Pogrążyć się w pracy, w lekturze*; a possible state of affairs, cf.: *A prisoner is always thoughtful of his liberty and safety. Zamyślił się głęboko nad przyszłością*;

2) mental engrossment might be either active, cf.: *Thoughtful of enjoyments forever left behind. Byli skupieni i pilnie pracowali*, or inactive, cf.: *He was so thoughtful, that going to put incense into a censer, he put it besides. Był tak zamyślony, że nie spostrzegł swego dobrego znajomego*;

3) the Experiencer partly keeps the situation under control, cf.: *Siedziała zamyślona z wzrokiem błądzącym po suficie*, or does not control it at all, cf.: *Lost in bewildrings of his pensive mind*;

4) mental engrossment suggests a certain degree (profundity) of its manifestation, cf.: *He was so engrossed in himself that he was startled by the sound of the back door opening. So he from side to side rolled, pondering deep. On wpada w letarg zamyślenia*;

5) mental engrossment provides for the Experiencer's temporary state, realised in a short, cf.: *I smiled, and was lost in thought for a moment. Alicja zamilkła na chwilę i w zadumie podrapała się łodygą pokrzywy w łokieć*; long, cf.: *Woosnam and Olazabal have been in a more contemplative mood after further moderate performances in New Orleans. Tu ojciec Barnaba zadumał się na długą chwilę, a obaj rybacy czekali w skupieniu*; or over-long, cf.: *When she became engrossed in some new work he made her preoccupation an excuse for drawing away from her. Coś ty taki zamyślony? Nic, tylko myślisz, ciągle myślisz*, time span;

6) the indicators of mental engrossment might be: a peculiar posture of the Experiencer, cf.: *She sat for some time leaning pensively on her arm. Wermel, jedząc bigos, ciągle mówił coś do zadumanego nad talerzem Lucjana*; the state of withdrawal of the Experiencer from connexion or association with surrounding things (social estrangement, communicative dissociation, spiritual separation from the world, etc.), cf.: *They lay for a while, their hands lightly clasped, each deeply engrossed in their own thoughts. Byli pogrążeni w zamyśleniu i niewiele z sobą rozmawiali*;

7) mental engrossment is usually accompanied by the restrictions (blockage) upon the Experiencer's senses, cf.: *The writer was so engrossed in her work that she did not hear the visitor enter the room. Był tak zamyślony, że nie słyszał pukania*; emotional sufferings, cf.: *She sat down weary and pensive at so sad a disappointment. Oparł czoło na dłoniach i zamyślił się smutnie*.

Semantic derivation of engrossment adjectives

The analysis of the models of semantic derivation will be carried out on the basis of the engrossment adjectives. The choice is substantiated by the specific feature of the adjective as a semiological subclass of words – just like verbs, adjectives consist of a list of arguement positions (Dik, 1992, p. 21) and reveal dependency which usually holds between the predicate and its actants. This suggests the relational (situational) character of the semantic structure of the adjective.

The analysis of engrossment adjectives valence affords ground to claim that the conceptual domain of mental absorption in the contrasted languages may expand the boundaries to:

a) behavioural, cf.: *a pensive attitude*, *a thoughtful touch*, *zamyślone postępowania*, etc.;
b) significative, cf.: *a pensive smile*, *thoughtful look*, *dreamy eyes*; *rozmarzone oczy*, *spojrzenie*, *zamyślona twarz*, *zadumany uśmiech*, etc.;
c) associative, cf.: *a pensive wind*, *twilight*, *skupione uliczki*, *zadumane brzozy*, etc.;
d) attributive, cf.: *a thoughtful cup of tea*;
e) manifestative, cf.: *a thoughtful movie*, *article*, *essay*, etc.

Modelling engrossment adjectives semantic derivation

One of the typical models of semantic derivation that engrossment adjectives reveal in the contrasted languages is the implicative model **"the state of mental engrossment → manifestation (outward expression) of the state"**, cf.: *pensive 1* "plunged in thought": *a pensive mind → pensive 2* "expressing or revealing thoughtfulness": *a pensive look*; *zamyślony 1* "taki, który się zamyślił, zatopiony, pogrążony w myślach": *Był tak zamyślony, że nie słyszał pukania → zamyślony 2* "wyrażający, ujawniający zamyślenie, zadumę": *Z zamyślonego spojrzenia i cichych westchnień można się było domyślać, że jest zakochana*. The model reveals the features of a universal tendency, as it regularly occurs across other languages, cf.: Ukrainian *задумливий погляд*; Serbian *задубљено гледати*; French *regard rêveur*; German *ein nachdenkliches Gesicht Machen*; Spanish *mirada pensativa*, etc.).

The model represents a kinesics situation, in which the engrossment state is conceptualised within the boundaries of a contiguous 'outward expression' concept: facial expressions, cf.: *"You know, Dad, I'm not so sure that I'm cut out for what you want me to be", he said, and sipped his coffee with a pensive expression on his face. Konserwator zrobił zamyśloną minę, zupełnie jakby zapomniał o obecności radcy*, body movements, cf.: *Dorabella's lively personality with its carefree lack of attention to technical details is in contrast to Mrs. Elgar's more disciplined, thoughtful movements. Roztrzęsione cienie w blasku lamp, zamyślone ruchy, a czas drwi, otwórz oczy wyobraźni, uśmiech daj, niech otwarte będą serca drzwi*, or peculiar postures, cf.: *She folded pensive, Dorcas-like hands upon her knees. Alicja siedziała sztywno, niczym lalka, zamyślona, jakby nieobecna, nie zwracając uwagi na otoczenie*. Here also belong metonymical extensions that characterise the Experiencer's adjacent (contiguous) activities, cf.: *Ashley took a pensive drink of coffee* – contiguous is a cup movement, set to the Experiencer's mouth. In Polish the extension like that resorts to the strategies of the conceptual recategorisation (Radden, Kövecses, 1999, p. 36), cf.: *Goulde w zamyśleniu ssał ustnik ← zamyślone ssanie ustnika* (*a thoughtful sucking of a mouthpiece*).

At the level of the involved participants, the extension of the situation concept suggests the transition based on the identification of the inner state of a person, involving different modes of perception, cf.: *Becker is one of the most original economists of our time, and his thoughtful, conservative voice stands out in an era of shouting. Usłyszałam zamyślony głos chłopaka*. It should be pointed out, however, that such a transition is characteristic of the situations with the participants belonging to the taxonomic class of HUMAN BEINGS. The change of the taxonomic class suggests the change of a semantic derivation strategy, cf.: *A single stock-dove began calling sadly and softly, with a dreamy peaceful moan. Chwila ciszy, pewne zastanowienie przy klawiaturze, a potem jakby zbudzone ze snu, leniwie, tajemniczo, markotno płyną tony, zamyślone nad dolą*. The extension of the situation concept, in this case, is reduced to the specifications of a participant's taxonomic class, resorting to the categorical model **"the manifestation of the engrossment state → the impressions obtained from the manifestation"**, cf.: *a thoughtful voice (of a person) → a thoughtful song (of a bird)*: *She could also recognise the thoughtful song of the robin*. In this example, the conceptualisation of the situation grounds on the auditory experience, which the bird's song evokes in the Experiencer. It is the case of the denotative analogy (Kustova, 2004, p. 56) based on the denotative identity of a particular tone reproduction. The impressions might also be evoked within the visual or tactile modes of perception, with fixed positions, cf.: *Dwie zadumane płaczące brzozy stoją na straży wsi*, or fixed movements, cf.: *How have I sate while piped the pensive wind*, being the analogies.

The engrossment state might also be the result of a certain intention, desire, conception, which a person tries to apply to something to achieve. The engrossment state, in this case, is conceptualised as a situation of

creativity aimed to foreground the Experiencer's potentials to meditate on something or to resolve an assigned task, cf.: *The believer is thoughtful to have a fuller view of him [Christ]. Siedział zadumany nad czystą kartką papieru*. The semantic derivation, in this case, realises the implicative model "**manifestations of the engrossment state → results of the manifestations**", cf.: *thoughtful* "characterised by or manifesting careful thought": *a thoughtful essay*; *wnikliwy* "zgłębiający coś sumiennie": *wnikliwa książka*. The derivation is the case of a metonymic transference, with the end-point focus schema underlying it (see Lakoff, 1987, p. 424). The model represents a scenario of the Experiencer's active concentration on the Stimulus, cf.: *thoughtful* "having the intention or purpose, aiming at or desirous of something; meditating on something": *thoughtful worshipper*, *player*, *policeman*, etc.; *skupiony* "pełen skupienia, wewnętrznej zadumy, mający uwagę skierowaną na dany przedmiot, intensywnie o czymś, nad czymś myślący": *skupiony obserwator*, *słuchacz*, *specjalista*. The concentration is construed as a telic realisation of the Experiencer's mental efforts to create an intellectual product, cf.: *thoughtful study*, *consideration*, *analysis*, etc.; *wnikliwa analiza*, *ocena*, *obserwacja*, etc.

One more representation is the actantial model "**the state of mental engrossment → potential realisation of the state**". The model represents the situation with the participant increase assigned to the semantic role "the possible state of affairs". In Polish the situation is commonly construed as an actual (based on direct observations) state of affairs, cf.: *Stach szedł w milczeniu, zamyślony nad przyszłością*. In English the situation like that may be construed as a usual (based on generalisations or recurrences) state of affairs, cf.: *A Prisoner is always thoughtful of his liberty and safety*. It is peculiar for the engrossment adjectives concept in English to extend to the boundaries of the evaluation concept. The situation, in this case, is enriched with a Beneficiary participant advantaged on the part of the Experiencer, cf.: *thoughtful* "showing thought or consideration for others; considerate, kindly": *She is very unselfish and thoughtful of others*.

The engrossment adjectives in the contrasted languages may also realise the categorical model "**the state of mental engrossment → the state of physical concentration**". The semantic development reveals the features of a metaphorical transference, resorting to a 'concentration analogy' strategy. The semantic derivation may apply to the models of two types: *centric* "concentration of objects – centering of objects" (the concentration of objects at a certain point is conceptualised as convergence of the objects to the center); b) *cluster* "concentration of objects – collection of objects" (placing objects closely to each other and one another is conceptualised as a conglomeration of the objects). In English the engrossment adjectives may apply to both models, cf.: *concentrated 1* "having the faculties collected and directed to one object": *Then calm, concentrated, and still, and slow, he lay coiled like the boa in the wood → concentrated 2a* "collected or massed as round a centre": *The parcelling of an army before a concentrated enemy*; *concentrated 2b* "brought together into smaller space or volume": *After the concentrated duties of the Sunday*. In Polish it is a cluster model that counts, cf.: *skupiony 1* "pełen skupienia, wewnętrznej zadumy, mający uwagę skierowaną na dany przedmiot, intensywnie o czymś, nad czymś myślący": *Byli skupieni i pilnie pracowali → skupiony 2* "złożony z elementów blisko siebie położonych; ścieśniony, zwarty": *Skupiona zabudowa wsi*.

Conclusions

Semantic derivation modelling is considered simultaneously with a situation concept extension. The extension of the concept is supposed to be determined by the changes the participants undergo within the source-to-target-situations transitions (shifts). The development of the mental engrossment situation construed by the English and Polish adjectives suggests the regular way of the changes, revealing the extension of the concept in the direction "internal (mental) systems" → "external (identificational, associative, evaluative, etc.) systems".

Engrossment adjectives in English and Polish apply to the actantial (based on the increase of the situation participants), implicative (based on the implications of the situation participants' changes) and categorical (based on the situation participants' taxonomic class specifications) models of semantic derivation.

The analysis of mental engrossment adjectives reveals differences in the ways the situation concepts extend in the contrasted languages. In Polish the extension is more localised what concerns the relationships between the target and source situations. The localisation suggests the restrictions in the concept extension, reduced to the behavioural, significative and associative conceptual domains. In English the target-to-source relations are somewhat loose. That predetermines a wider scope of the source concept extensions, additionally overlapping the boundaries of the attributive and manifestative conceptual domains.

In order to proceed with an overall survey of engrossment vocabulary semantic derivation models and to establish the general cognitive mechanisms that underlie the semantic development of engrossment words in the related and non-related languages, it is necessary to carry out further research into semantic derivation modelling in its comparative-historical and typological aspects.

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