The Relevance of Contextualization and the Cognitive Understanding of Semantic Change

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0. Introduction

This paper aims to examine the cognitive approaches to understanding two aspects of language change: semantic change (including semantic narrowing and broadening) and analogy, and the ways in which contextualization during discourse contributes to the emergence of new meanings. The whole investigation is embedded in the framework of cognitive linguistics, in which framework the cognitive processes behind the emergence of new meanings are discussed. The paper is structured in the following way: first, the nature of semantic change and analogical change itself will be described, after which the various cognitive and mental processes (such as conceptual metaphors, embodiment, metonymy, etc.) are detailed, which is followed by an account of the possible role contextualization plays when new meanings are brought about. As a synthesis of semantic change, its cognitive aspects and the role of contextualization, the paper concludes with a synchronic outlook and a survey of changes observable in certain present-day languages, exemplified by cases taken from English and Hungarian.

1. The Nature of Semantic Change and Analogy

The workings of semantic change and analogy have long been under the scrutiny of linguists, with one of the earliest typologies being that of Bréal (1897/1900) who classified semantic change into four categories: (I) change from general to specific meaning (restriction of meaning), (II) change from specific to general meaning (expansion of meaning), (III) metaphor and (IV) change from abstract to concrete meaning (concretion of meaning) (Bréal 1897: 119–153/1900: 106–138). The first general and comprehensive treatise of analogical change was created by Kuryłowicz

(1949), who examined the kinds of regularities to be found in this rather haphazard phenomenon and which led to the formulation of six 'laws' for analogical change, which were amended, and in part challenged, by Mańczak (1958) who established nine tendencies of analogy. Hock (1991: 210–234) provides a somewhat detailed account and explanation of these laws and tendencies for reference, and despite the main topic of this current paper being the discussion of analogy and language change, for reasons of brevity the above mentioned processes can not be expanded on here in detail. Nevertheless, it should be noted that both Kuryłowicz's laws and Mańczak's tendencies are predominantly concerned with morphology and morphological change. Analogy, however, is not confined to the realm of morphology and inflectional patterns, because it is a basic cognitive mechanism that enables humans to grasp and understand the world through exploiting familiar knowledge and perceived similarities (Győri 2002: 137). Anttila (2003: 428–429) also describes the "faculty to analogize" as being innate, and being, in its essence, a very powerful ability to copy.

The notion of semantic change can be described or interpreted in a number of different ways, depending on whether it is understood as a process or as an outcome and whether the approach from which it is examined takes the linguistic form as constant (the semasiological approach) and focuses on changes in meaning associated with a given form, or takes the concepts as constant (the onomasiological approach) and focuses on which forms are used for expressing that given concept (Traugott 2006b: 124). Concerning the classification of semantic changes, a number of subtypes can be established, which are: semantic broadening (or generalization), semantic narrowing (or specialization), pejoration and amelioration. Semantic broadening occurs when a word that has a specialized meaning is used to denote a broader scope of meanings, that is its originally specialized and narrow sense is extended or generalized, for example in the case of Modern English *bird* < OE *brid*[1] 'young bird, nestling' the originally restrictive sense of young bird was broadened and became inclusive for every kind of birds. Semantic narrowing is a phenomenon that is exactly the reverse of semantic broadening, namely that a word with an originally broad and inclusive meaning acquires a restricted and more specialized sense, for instance ModE *meat* < OE *mete* 'food (in general)' (cf. Swedish *mat* 'food'). Pejoration and amelioration work in a similar manner as narrowing and broadening, which means that the underlying principle of amelioration and pejoration is the same, but they operate in opposite directions.

1 The Modern English form arose through a metathesis of *r* and *i*. Also cf. German *Vogel* 'bird' cognate with ModE *fowl* 'domesticated bird' < OE *fugol* 'bird' which constitutes a case of semantic narrowing.

Pejoration is a process whereby a word that originally has a positive meaning and a positive semantic prosody acquires a negative sense and negative connotations, for instance ModE *silly* < OE *sælig* 'blessed, happy' (cf. German *selig* 'happy, blessed', Icelandic *sæll* 'happy'). Amelioration, on the other hand, happens when a word with originally negative connotations is assigned a new, positive meaning, such as ModE *knight* < OE *cniht* 'boy, servant' (cf. Traugott 2006b: 125).

It can safely be assumed that similarity and contiguity, which are also the basic motivating forces of metaphor and metonymy, respectively, play a significant role in the emergence of semantic change. Those words whose meaning is extended by attributing a new meaning on the basis of a real or perceived similarity to other notions or entities acquire metaphorical meanings and those words whose meaning is extended via the attribution of a new sense that arises from a real and tangible association (in most cases a part-whole relationship) acquire a new, metonymical meaning. While metaphor and metonymy make use of the similarity and contiguity of senses, two other initiators of meaning change are also very much reliant on these two relations: folk etymology and ellipsis. These two phenomena are form-centered rather than sense-centered. Folk etymology arises from a similarity of form (phonological, morphological or orthographic) and a contiguity of form brings about ellipsis (McMahon 1994: 182–184). Folk taxonomy works along similar lines as the phenomena described previously, as can be seen for instance in the case of the *Jesus lizard,* which is a member of the basilisk genus capable of running across the water's surface and is so named because of the perceived similarity between the lizard's capability of running on water and Jesus' ability to walk on water.

2. The Cognitive Base of Semantic Change

A very basic feature of human cognition is the ability of pattern recognition, which patterns may be those of faces, images, sounds or even linguistic signs. This recognition of patterns in linguistic signs or construed meanings is important for new meanings to emerge, because their emergence is based on the previously described copying function of human cognition that arises from its analogous nature. The emergence of metaphors and metaphorical meanings is also rooted in the analogizing nature of cognition, because they rely on a perceived similarity of two entities or concepts, the similarity of which could not be perceived without the ability to recognize the shared patterns of the two concepts in question.

The benefit of the above described nature of human cognition is the ability to categorize entities and concepts, with the ultimate purpose of "[providing] maximum information with the least cognitive effort" (Rosch 1978: 28). This categorization occurs on the basis of prototypes (as opposed to the necessary and

sufficient features that can be found in each instance of the category, as described by the classical view), which are the best representatives of their respective category, which means that some instances of categories are less prototypical and therefore peripheral. Categories in the prototype theory have fuzzy boundaries, meaning that certain categories may overlap to varying extent, due to the fact that less prototypical and more peripheral instances of categories can often be subsumed under the neighboring category, therefore category membership is subject to gradation (cf. Langacker 1987: 369–370). In connection with the prototype theory, Rosch (1978: 30–35) also describes the basic level abstractions and basic level categories, which are those that have the highest cue-validity, and are the most readily perceivable. During first language acquisition, children acquire the basic level categories first. Essentially, cue-validity refers to how prototypical an instance of a given concept is, by showing how valid its features (cues) are for evoking a given category.

It is the cognitive processes that actuate language change, which will yield the linguistic coding of categories, that is, lexicalization. Győri (2002: 143–147) describes four factors that are involved in, or even responsible for, the emergence of 'coding expressions' i.e. those expressions that explicitly mark certain features of the conceptual category. These four factors are: cue-validity, cognitive economy, perceived world structure and conjunctivity. Győri suggests cue-validity, as it has been described in the previous paragraph, as the central factor in the selection of coding expressions from among the features. Cognitive economy and perceived world structure are related to cue-validity and to the principle of conveying the maximum of information with minimal cognitive effort.

Reddy's seminal paper about the description of metalanguage in terms of the conduit metaphor (Reddy 1979) demonstrated and proved that everyday language use is largely metaphorical, and that metaphor is in fact a matter of thought and not so much a matter of language. Running contrary to Reddy's theory is the pragmatic approach to metaphor, put forward by Searle (1993), according to which metaphor is purely a linguistic phenomenon, and metaphoric or figurative interpretation of utterances comes only after examining whether the utterance can be understood literally. If it can not, then it must be metaphorical. Therefore, every utterance is examined whether its truth conditions are fulfilled, i.e. it is to be taken in the literal sense, or they are broken, which means that it is a figurative utterance and is to be understood metaphorically.

Perhaps the two most important figures of speech that are part and parcel of semantic change and are ubiquitous in everyday discourse are metaphor and metonymy. Metonymy can be seen a 'precursor' to metaphor (Koch 1999: 139), inasmuch as the conceptual contiguity which is the basis of metonymy can lead to an associative leap which constitutes the basis of metaphor, therefore metaphors can

emerge from metonyms. As opposed to metonyms, which are based on conceptual contiguity, metaphors are brought about by a perceived similarity between two concepts or entities. The conceptual metaphor theory (Lakoff 1993) holds that metaphor is a matter of thought and conceptualization, and is brought about by asymmetric and partial mappings across conceptual domains. The conceptual domains between which the cross-domain mappings occur are the epistemic source domain and the ontological target domain. The epistemic domain contains knowledge of everyday things gained from experience, while the ontological domain, onto which the source domain is mapped, contains abstractions, emotions and abstract notions (cf. e.g. Ibarretxe 1996: 119–120). Metonyms, on the other hand operate in only one conceptual domain and no cross-domain mapping is involved, and they can be realized in a variety of forms and can give rise to different subtypes, such as synecdoche, which is based on a *pars pro toto* relationship, but in each case, the central notion is that of contiguity.

The emergence of new meanings through metaphors, and the emergence of metaphors themselves, very often occurs on an experiential basis. This is because human cognition has a tendency to make sense of new phenomena in terms of already familiar experience, and to conceptualize abstract notions in terms of concrete and tangible concepts, which seems to be in accordance with the general direction of semantic change from concrete to abstract. Furthermore, embodiment is an indispensable part of human cognition, and it also manifests itself in language and conceptual metaphors. Since the very root and origin of human conceptualization and meaning is perceptual experience and the human body itself and the different movements and manipulations of and by the body (cf. Győri & Hegedűs 2012: 322), we tend to build our conceptual metaphors around it, such as UNDERSTANDING IS GRASPING, MORE IS UP, LESS IS DOWN, etc.

The underlying cognitive mechanisms of semantic change are not only relevant for the understanding of how the meanings of attested words change, but they are also relevant for historical comparative reconstruction and the establishment of the semantic content of the words of unattested protolanguages. Győri & Hegedűs (2012) describe the problems of establishing universal tendencies of semantic change and the cross-linguistic applicability of such universal tendencies. Furthermore, embedded in a cognitive theoretical framework, they argue for the relatedness of the original senses of Modern English *knee* and *chin/jaw.* Their argument is that these two words in fact derive from the same Indo-European etymon, and represent two different ablaut grades of it, with their meaning differentiation and semantic extension arising from the perceived resemblance of shape and the notion of angle and angularity.

Concerning the motivations of semantic change, a number of factors can be differentiated (for a cognitive overview see Blank 1999). One such factor, undeniably, is the expressive need of the speaker (cf. Blank 1999: 63), and the need for clarity. The speakers needs to make themselves understood with as much ease as possible, and also in a way that demands the least effort from the hearer's part for understanding and decoding, which seems to be in accordance with the Gricean maxim which dictates that the speaker say as much as is necessary and in such a way that facilitates understanding.

3. The Role of Contextualization

Utterances of a discourse are rarely standalone, discrete units of communication but much rather active members, and also directors, of the flow of information. Utterances are both shapers of and shaped by discourse. In its essence, discourse is a negotiation between the mental content and the communicative intentions of the speaker and the hearer, which content and intentions are mediated through language. This procedure of negotiation is embedded within the context of the discourse, which is dynamic and conventional at the same time. It is dynamic, because each turn and utterance in a dialogue, monologue and any other form of communication and human verbal interaction brings about and activates an ad hoc context in which that utterance makes sense and is to be understood, and it is conventional because there are rules that govern conversation and turn-taking, for instance the oft-cited Gricean maxims of conversation (Grice 1975), and both the hearer and the speaker adheres to them[2] and expects that every language user also adheres to the rules.

Shared, common background world knowledge that each individual has internalized is also utilized during contextualization in order to make sense of and interpret the speaker's utterances. Based on this background world knowledge and cultural knowledge, participants of the discourse can bring about implicit assumptions, or inferences, regarding the content of the discourse. For successful communication it is indispensable for the participants to have knowledge of the situational context and the relationship between the hearer and the speaker in the speech situation, as well as to have knowledge of how and where are the utterances created and understood and what kind of spatial and temporal relationships exist between the participants (Tátrai 2004: 480). Contexts of utterances are usually

2 However, breaking the rules can also be construed as conventional behavior. If one of the participants of the conversation flouts one or more of the conversational maxims, either on purpose or accidentally, they will, again either deliberately or unwillingly, communicate their intention which will enable the other party to infer the speaker's intended meaning.

internally constructed by each participant, which means that for each conversation or discourse that their participants engage in, the context is constructed on the spot, in an ad-hoc fashion, by taking into consideration the previously mentioned relationships and situational context. Warren (1999: 219) distinguishes two types of word meaning: out of context dictionary meaning and contextual meaning which refers to the value that is added to a word in context. Finally, semantic frames, which contain information regarding specific situations, and are based on experience, are also relevant for contextualization, because they introduce a specific context in which the utterances are to be understood.

Speech acts, especially indirect speech acts, are strongly linked to context, contextualization and intended meanings. Indirect speech acts (such as, for instance, the oft-cited utterance "*It's getting hot in here*") are virtually meaningless without knowing what kind of context they should be understood in. Users of indirect speech acts, in order to achieve their intended perlocutionary effect, need to be perfectly aware of the speech situation, the context of the discourse and the relationship of the hearer (or hearers) and the speaker.

Semantic change does not and can not come about in a vacuum, contextualization is a necessary precondition and circumstance for new meanings to arise which always happens as a result of "context-dependent alteration of usage" (Győri 2002: 125). Traugott (2006b: 125) also notes that "change results from the use of language in context" (ibid.) which context can be cultural or linguistic. This means that meanings are rarely, if ever, stable and that they are to be understood as rather elusive, yet dynamic and constantly evolving phenomena, with the current meaning of a word in any given period in the history of the language deriving from and being related to a previous meaning. Also, the different types of semantic change are not in conflict with each other and are not mutually exclusive, but rather feed each other.

While on the subject of the role of contextualization, it can be mentioned that Koch (1999: 139–140) distinguishes two, interrelated, types of metonymy: ad hoc metonymy and metonymic polysemy. Ad hoc metonymy, as can be inferred from its name, is created for the purpose of the currently ongoing conversation or discourse, while metonymic polysemy refers to the metonymic relationship of two senses of a polysemous word, such as *bar* 'counter' and *bar* 'public house'. Furthermore, in his discussion, Koch establishes that the lexicalization of polysemous meanings come about through the lexicalization of ad hoc usage of words in discourse (ibid.).

Finally, as it has been noted in section two, the understanding of the cognitive processes behind semantic change is rather significant for semantic reconstruction, yet context and contextualization may also be quite an important aspect to be considered. The prevailing and most widely practiced method of semantic

reconstruction is that of the abstraction or accumulation of meanings of the descendant words found in the Proto-Indo-European daughter languages (cf. Győri 2005: 199–200). However, this methodology can be challenged by a method that thoroughly examines the linguistic and social context in which the reflexes of the reconstructed form are used (Clackson 2007: 191–195). This would mean, then, that by employing this method, semantic reconstruction would need to take into consideration aspects of sociolinguistics and cultural studies which would be rather difficult task to carry out in a diachronic investigation. Nevertheless, semantic change cannot be separated from context, be it linguistic or cultural.

4. The Synchronic Perspective

Owing to the fact that languages are constantly evolving, semantic change is also a constantly ongoing, ever present phenomenon of natural, human languages, and a present-day speaker of any language is most likely to be unaware of just how productive and innovative the language that he or she speaks is. However much semantic change is a process that is best understood from a diachronic point of view, it is nevertheless the synchronic variant (or variants, dialects or even sociolects) spoken in any given epoch of the language's history in which the change itself originates. A number of extralinguistic factors also constitute a significant force in bringing about semantic change, for instance technological progress, changes in the sociocultural environment, foreign rule (which very often leads to contact induced language change and the influx of varying amounts of foreign words), language policies and conscious effort aimed at rejecting foreign words and borrowings, and expressing new concepts through utilizing the morphological inventory of the language – with varying degrees of success, we should add.

Probably the best example of such 'linguistic purism' in the present-day variety of a language might be the case of Icelandic where deliberate and conscious effort is made to express new concepts by coining 'native' words from 'native' elements (Hutterer 1986: 138–139). These new coinages most often take the form of relatively transparent compounds, e.g. *sjónvarp* 'television', composed from *sjón* 'vision, sight' and *varp* 'projection' (from the verb *verpa* 'to throw', cf. German *werfen*) or the extension of the meaning of already existing words. The way in which these meaning extensions are brought about seem to be in accordance with the previously described analogous copying function of cognition and the tendency to build on perceived contiguities and similarities, for instance in the case of *sími* 'telephone', which comes from a now obsolete word, *síma* meaning 'cord, thread', and the connection between 'cord' and 'telephone' is quite apparent. Perhaps the reason why these newly introduced words are accepted and integrated into the language

rather easily is because their new, assigned meanings conform to the rules of vocabulary expansion and to the general tendencies of human cognition. It should also be noted that such conscious intervention and introduction of newly coined words may result in the emergence of novel conceptualizations and new conceptual metaphors. Furthermore, a plethora of neologisms are coined every day by speakers all over the world, the overwhelming majority of which do not even make it into usage by a wider circle of more than a few people, let alone to lexicalization.

Turning our attention to Hungarian, but still staying for a little while with the topic of conscious innovation, the work of the Hungarian neologists from between the late 18th and the middle of the 19th century should be mentioned. The main motivation behind this 'intervention' was that Ferenc Kölcsey and the other innovators felt that Hungarian was lagging behind other European languages in its capability to express new notions, and felt the need to update the language. The neologists sometimes resorted to the introduction of the loan translation of foreign terminology (most commonly German), but the vast majority of the innovations were carried out by the native morpheme inventory of the language, and were of a lexical nature, which very often required the reintroduction or reinterpretation of obsolete words. The other frequently used technique of linguistic innovation was the reintroduction of obsolete derivative suffixes that were often attached to newly formed words, which were formed through employing the methods of clipping and back-derivation. The bottom line and the outcome of the entire neologist agenda was that thousands of new words were coined, many of which are still frequently used in present-day Hungarian. Their success, similarly to the success of the Icelandic neologisms, is perhaps attributable to their naturalness (at least the naturalness of those that have survived and became an integral part of everyday discourse and language use) and to the fact that they were mostly built on analogy.

Among the currently observable ongoing changes in Hungarian, the case of the verbal prefix *be-* 'in' is a noteworthy example to be brought to mind (cf. Balázs 2010: 169; Szili 2005a, 2005b). Verbal prefixes in Hungarian originally conveyed – and still convey in present-day Hungarian – spatial relations and spatial movements, such as *kivisz* 'take out', *elmegy* 'go away', *összehoz* 'bring together', etc. However, in recent times, the *be-* prefix has undergone a rapid expansion of meaning, very often at the expense of other prefixes. These new meanings include meanings of inward motion, meanings of totality (e.g. *beerdősödik* 'becomes completely forested'), and meanings of saturation and completed actions (e.g. *bedrogozik* 'drug up') (Balázs 2010).

Finally, as a side note, the role of translations – and especially low quality, quasi-correct translations – should be mentioned. Through employing syntactic and morphological structures in the target language which are calqued from the source language and reflect those syntactic and morphological structures of

the source language which are not found in the target language, the translation may – inadvertently – introduce new meanings, new ways of expressing oneself and new ways of conceptualization, all of which may appear foreign and unnatural to speakers of the target language.

5. Conclusions

The purpose of this paper was to investigate the cognitive aspects of semantic change, and the ways in which context and contextualization facilitate the emergence of new meanings. It has been shown that semantic change relies on basic cognitive processes and mechanisms, which are analogy, categorization, embodiment, metaphor, metonymy and conceptual metaphor. Furthermore, it has also been pointed out that new meanings can only come about in a context, which might be linguistic or cultural.

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