SEMANTIC CHANGE
AS COGNITIVE ADAPTATION PROCESS

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1. Research preliminaries to the dissertation

The dissertation is built to a large extent on papers I have already published. I wrote these papers in my two main research topics. On the one hand I mainly dealt with the cognitive aspects of semantic change, and on the other I examined the evolutionary function and adaptive value of language. In connection with semantic change firstly I studied the cognitive processes behind speakers' linguistic behavior when due to challenges of communicative expressiveness and efficiency they modify conventional meanings in the communicative interaction, and secondly the linguistic process in which the new meaning becomes conventionalized and part of the language system (Győri 1990, 1994, 1996a,b, 1998a,b, 2002; Győri & Hegedűs 1999; Győri, Hegedűs & Dobó 1998).

In my other research topic I examined how the exclusively interindividual function of communication and the exclusively individual function of cognition becomes combined into one system in language. I studied how this joint system facilitates symbolic cognition, whose adaptive advantage is that it makes possible the distribution and representation of individually acquired knowledge in social interaction, and how it ensures a culturally determined, and therefore relative, common mental model of reality for s speech community. With the help of such a model a qualitatively new, higher level of cognition emerges (Győri 1992, 1995a,b,c, 1997, 1999, 2000a, 2001).

The present dissertation is a synthesis of these two topics. I have already started the preliminary studies for this work in some papers (Győri 2000b, 2003, to appear). I examined how semantic change, actuated by the cognitive processes underlying the communicative interaction of speakers and hearers, flexibly and adaptively forms the mentioned mental model of a speech community, which model regulates the common interaction of the interlocutors with their particular natural and cultural environment. I also examined how this model functionally represents this environment and how it ensures adaptive orientation in it for the members of the speech community.

2. A brief history of the research in the topic of the dissertation

The study of semantic change is as old as the beginnings of historical linguistic research (Paul 1920). Historical semantics deals primarily with the following problems: unveiling the causes of semantic change, the classification of the types of the changes, the examination of possible regularities, as well as the theoretical question whether certain predictions can be made with regard to the direction, frequency, interconnection, etc. of linguistic changes (Algeo 1990; Anttila 1989; Campbell 1998; etc.). Today we can find only minor deviations in the description of the causes of the changes and in the classification of the various changes when comparing the chapters on semantic change in monographs and textbooks on historical linguistics. However, in connection with the predictability, regularity and direction of semantic change the opinions of the authors differ significantly (König & Siemund 1999; Traugott 1988, 1990; Traugott & König 1991; Venneman 1993).

The study of the above questions is based on the practical application of historical semantics in linguistic reconstruction. The two main aims and tasks of historical linguistic research is the discovery of genetic relationships across languages and the study and description of the historical changes in individual languages. These two areas of investigation presuppose each other. For discovering genetic relationships from the comparison of languages we have to find out about the changes in the individual languages in the course of the comparisons, from which some earlier linguistic stage can be reconstructed. At the same time an assumed genetic relationship – on the grounds of various observable common features – serves as the basis of the reconstruction of changes. Primarily the regular and systematic sound correspondences can suggest the possibility of genetic relatedness, and these correspondences provide the basis for the description of phonetic changes and the establishing of sound laws. However, this is possible only in conformity with the appropriate semantic changes. Because of this, historical semantics is also connected to the study of historical phonology. The existence of regular sound correspondences allows the reconstruction of a common etimon only in the case of an appropriate semantic relationship between the assumed cognates (Fox 1995).

Compared to the regularity of sound changes, for many actual semantic changes we can only give seemingly *ad hoc* explanations, and thus semantic reconstruction is a lot more problematic from a methodological point of view than

phonological reconstruction. For the sake of achieving similar precision, the assumed cognate meanings have sometimes been analyzed into their semantic components and the postulation of an earlier original meaning has been attempted on the grounds of common components. This method yields reconstructed meanings which are too general and abstract, and often unrealistic in the case of a proto-lexicon (Sweetser 1990). Since individual semantic changes reflect the operation of general cognitive processes of the human mind rather than the regular adding up or elimination of semantic components, historical semantics prefers explanations based on the former (Anttila 1989: 133, 141; Anttila 1992; Campbell 1998: 269). This means that the semantic theories which traditionally approach meaning on some formal basis are incapable of providing a satisfactory explanation for semantic change.

In the majority of semantic changes the connection between the original and the derived meaning is based on some kind of analogy, association, non-logic-based conceptual combination, or the non-rule-governed stretching or restriction of category boundaries. Because of this, meaning extension, as the synchronic antecedent to historical semantic change, is not explicable in an autonomous componential semantic approach, but only on the basis of an encyclopedic-prototypical meaning structure (Langacker 1987: 157). Cognitive semantics presupposes these kinds of meaning structures, and according to its point of view these are shaped by various cognitive mechanisms, primarily metaphor and metonymy, that is, those universal human mental processes which are employed in understanding various phenomena of reality (Lakoff & Johnson 1980; Johnson 1987; Lakoff 1987). In accordance with this, there has been a recent growing interest in the cognitive analysis of semantic change and in a general cognitive approach to historical semantics (Blank & Koch 1999; Geeraerts 1997; Sweetser 1990).

The question how language is adapted to the environment has only been treated very briefly and in very general terms by only a few scholars. According to Rosch (1978) specific principles of categorization govern the formation of a category system representing the environment in a functional way in every organism, and in the case of humans this is manifest in the emergence of linguistic categories. This is based on the fact that any adaptation to the environment and the orientation in it is founded in the acquisition of knowledge about it, and the acquisition of this knowledge and its application for adaptation and orientation is a biologically

determined ability in every organism, including humans (Plotkin 1994). Because of this, human cognition does not differ essentially from the cognition of primates. It is only supplemented by a symbolic capacity, which enables the cultural dissemination of knowledge with the help of language, and by this the formation of a common perspective of their natural and cultural environment for a whole community (Tomasello 2002). The most detailed study of language differences across cultures – from a functional and cognitive point of view – in which the adaptation to their individual environment is manifest is Palmer (1996).

3. The problems studied and research tasks

In the dissertation I examined the following problems: how the category system of a language reflects the environment of its speakers; how and why the category system of a given language has developed; and what factors influence its change and modification. For this undertaking first it had to be clarified what place linguistic cognition takes in human cognition and in the more general scope of cognition. In other words, how the general features of cognition influence or determine the characteristics of linguistic cognition. Since the given environment is reflected in linguistic categories, i.e., meanings – in the conceptual structures forming them – a more detailed objective of the research was to examine how these categories are formed historically. For an accurate clarification of this problem it was necessary first to examine the following questions at the level of the synchronic language use of the individual: under what circumstances, due to what influences, and during what concrete cognitive processes linguistic categories are modified; and then to examine what factors influence the survival of the modified and novel meanings – resulting from the linguistic behavior of the individual – at group level, to become finally established in the system of the language.

4. The research

The category system of a language is formed and modified historically through lexical-semantic change. The research studies this process of the emergence of linguistic categories and its cognitive background. As a first step I examined the wider connections between language and cognition, as well as the cognitive function of language. I examined how language is related to the general biological function of cognition, which is the creation of an adaptive functional internal model for an organism about its environment for the sake of the regulation or facilitation of orientation and survival in it.

On the basis of this background I examined in detail what cognitive processes play a role during synchronic language use in the flexible, adaptive and functional application of the categories (meanings) of a given language. I studied the cognitive processes taking place in the mind of the individual in the course of everyday linguistic behavior when linguistic categories must be modified so that the speaker is in a position to see and make seen the phenomena of the environment from the cognitive perspective which he deems most suitable for his purposes. I also studied the linguistic conventionalization and selection process in the course of which synchronic adaptation occurring as a result of cognitive-communicative challenges actuates and produces the long-term adaptation of the language system as a social cognitive model.

In the alteration of linguistic categories reflecting a particular environment, or one's relation to it or a perspective taken on it, i.e., in semantic change, not only relative and individual operations can be observed but also universal tendencies. I examined what definite universal cognitive mechanisms engender these, and studied in detail the cognitive background of conceptual correspondences and similarities found in the changes.

5. Summary of new scientific results of the dissertation

In the dissertation I showed that the semantic-lexical changes going on in language, when taken together, form a historical cognitive adaptation process. This historical process is the result of adaptive linguistic behavior at the level of synchronic language use, which is manifest in the perspectival application of categories, or meanings. This

is possible because the cognitive background of meanings is formed by conventionalized but malleable conceptual structures. Thus, linguistic categories are representations adapted to the given environment of the language users, and continuously adapt to the occurring cognitive needs in the course of the speakers' interaction with their environment.

As the background of this process I showed that the cognitive function of language cannot be separated from the general function of cognition, which is the flexible adaptive and functional representation of the given environment for the sake of guiding the interaction with that environment, adapting to its changes relevant for the appropriate behavior in it. The task of linguistic cognition is therefore the formation of culturally shared mental categories which represent the human environment in an adaptive and functional way. From this it follows that this function is manifest only in the category systems of individual languages, in their flexible application and continuous modification and change. Thus, language is not an absolute model mediating some kind of metaphysical truth about reality, but every individual language is the relative (i.e., adaptive and functional for them) social model of the immediate environment of its speakers.

I pointed out four concrete cognitive factors which influence or even determine the flexible extension and modification, i.e., adaptive application, of conventionally given categories, or meanings. These factors guide the choice of those given conventional meanings in communicative interaction which are the most suitable for representing the given altered perspective. Following this, I claimed that that semantic change is the result of a linguistic-social selection process which occurs on the basis of the variability engendered by temporary, contextual semantic modifications. In the course of this process the categories representing adaptive perspectives become culturally valid, i.e., become conventionalized.

Finally I examined how the mentioned cognitive factors lead to universal tendencies in semantic change, at the level of both form and content. I claimed that the basis of content universals is formed largely by image schemata and the metaphorical and metonymical projections based on them. I also showed that at the same time the meaning or category inventory of individual languages underlying the projections can lead to particular perspectives. In other words, linguistic relativity

becomes tangible in semantic change. These universal and relativistic phenomena together form the basis of the adaptation process observable in semantic change.

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