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## THE RESEARCH OF GRAMMATICALIZATION AND MODERN THEORIES OF LANGUAGE<sup>1</sup>

To Péter Sárközy, my dear teacher, without whom I would never have become a philologist, and would never have studied such abstract linguistic questions in which he may never have had any interest...

### 1. Introduction

The beginnings of research on grammaticalization go back to the early 18<sup>th</sup> century. In the 19<sup>th</sup> century, grammaticalization had been one of the explaining principles of historical linguistics, and this opinion was mirrored in 20<sup>th</sup>-century approaches until the 60s. The modern concept of this term is credited to Meillet (1912), and the basic definition to Kuryłowicz: “Grammaticalization consists of the increase of the range of a morpheme from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one.” (Kuryłowicz 1975: 52) Thus, according to this classical definition, grammaticalization is a one-way, diachronic process chiefly involving morphology.

20<sup>th</sup> century linguistic tendencies were usually unfavorable for research into grammaticalization. One of the basic reasons for this lies in the above definition: while the research into grammaticalization (as the study of change) was traditionally connected with historical linguistics, the 20<sup>th</sup> century, on the whole – after the publication of Saussure’s magnum opus and the spread of structuralist tendencies – became the century of synchrony, the research being based on systemic linguistics getting into the center of linguistic analysis. Yet there are various other reasons why grammaticalization research has been pushed into the background. The view continued by the Saussurean and structuralist tendencies (and partly accepted by today’s structural, i.e. formal grammars) has several aspects that should be taken into consideration. (We shall look at these facets in connection with the Saussurean conception and modern language theories later.)

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<sup>1</sup> This article is based on an opening lecture read at the Budapest Uralistic Workshop, in the Research Institute for Linguistics of the Hungarian Academy of Sciences, on September 4<sup>th</sup>, 2003. My sincere thanks go to Csilla Dér for her help with finding the appropriate literature on the internet, as well as to my two anonymous reviewers for their valuable comments on the Hungarian version of the paper.

At the same time, the 90s saw a spectacular boom of research into grammaticalization compared with the similar research of the previous period. The aim of this paper is to sketch out the background of the linguistic theory of modern grammaticalization studies, in other words, to demonstrate why it was that in the 90s this research field, having been ignored previously, became cultivated again: why we are witnessing the renaissance of grammaticalization research.<sup>2</sup> Therefore, in this paper I will not show any concrete grammaticalization processes, nor will I go into the details of all possible definitions of the concept of grammaticalization, or give an account of discussions around grammaticalization; partly, I take them for well-known facts, and partly, I think that forthcoming papers on concrete research will solve a number of debated questions.<sup>3</sup>

Within the framework of this essay, I cannot set myself the aim of profoundly demonstrating the entire history of 20<sup>th</sup> century linguistics, or even of one single theory. What I wish to give is an outline of the strongest tendencies; therefore, the picture will necessarily be far from complete. Besides, the background I sketch here from the viewpoint of the history of linguistics, is an individual (yet hopefully not singular), thus naturally disputable, interpretation of concepts and processes.

The central idea of the paper is that the ‘timing’ of the boom of grammaticalization research is no accident: in its background there are changes in linguistic thought, i.e. new linguistic tendencies.

## **2. Point of reference in modern tendencies: Saussure’s linguistic theory**

One of the principal standpoints of grouping today’s linguistic ideas into tendencies may be to what extent they continue Saussurean, i.e. structuralist, traditions of what and how a linguistic theory should model. When mentioning Saussure, it is well worth returning as far back as the end of the 19<sup>th</sup> century, since the linguistic paradigm shift (the expansion of synchronic linguistics based on systemic theory) connected with Saussure was new in comparison with the ideas of the

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<sup>2</sup> In historical and Finno-Ugric linguistics the temporary setback and re-appearance of grammaticalization research may not seem so sharp (because, on the one hand, such research has been, and is, conducted ever since historical linguistics started in the 19<sup>th</sup> century, but on the other hand, there has not always been a – perhaps longed-for – harmony between Finno-Ugric studies and the actual tendencies of linguistic theory; see Widmer’s manuscript), but in the light of the main trend of general/theoretical linguistic research the boundaries between the periods are remarkable.

<sup>3</sup> I have also tried to shed some light on these questions in some previous articles; cf. Ladányi (1998, 1999, 2000).

Neogrammarians' generation of the historical school; on the other hand, as to the basic function of language, the so-called 'cognitive turn' of linguistics that occurred in the 1950s of the 20<sup>th</sup> century was (in a different way and on another level) in some respect a return to the pre-Saussurean concept of language (for details, see below).

The Neogrammarians' 'ideologist', Hermann Paul, defined language as a psychic organism of associations living in the soul of the individual. He also referred to the linguistic habits, the so-called usage, connecting language changes with the difference between individual language use and usage: a degree of freedom of individual language use from usage may bring about language change, in case the same different feature appears with several persons (having similar conditions, i.e. social status). Since according to the Neogrammarians, the facts of the synchronic state of language may be explained only by involving the historical viewpoint in the investigation, Hermann Paul says that the only scientific view of language is the historical.

Saussure, surpassing the historical approach, in a sense developed the Paulian language definition, partitioning the individual and social relations in a different way. By Saussurean definition, the linguistic phenomenon in its totality is heterogeneous, insofar as it has physical, physiological and psychical, descriptive and historical, individual and social, relations, etc., at the same time. This heterogeneous linguistic phenomenon, he called 'langage', separating it from the real object of linguistics, 'langue', (which is just a part of the 'langage') – a homogenous and structured system, in which the elements acquire their value only within the system.

Homogeneity in Saussure's theory can be traced from several viewpoints. On the one hand, language (i.e. 'langue') is homogeneous, because its units, the signs, are uniform, psychic entities, among which there are linear and associative relations; thus the Saussurean definition of language seems somewhat to be similar to that of Hermann Paul, by which language is a psychic organism based on associations. Although the linguistic units, the signs in Saussure's theory, are also psychic, at the same time, for him it is also important that the relation between the two sides of the sign – the signifier (*signifiant*) and the concept signified (*signifié*) – is established socially, by convention. The conventionality of the signs may be connected with the Paulian concept of 'usage', yet while for Hermann Paul language belongs to the individual, and usage refers to speakers' language habits, in the Saussurean conception, language as a whole does not belong to the individual but exists only in society. For Saussure, the individual peculiarities of language mean not merely the individual freedom of language use (i.e. that, owing to some unregulatedness, the individual may divert from the language habits, the usage),

as the Neogrammarians thought, yet also that the individual's linguistic knowledge is always imperfect: language in its totality can be found only in community, and the individual can receive a share of linguistic knowledge only as a member of this community.

Language is also homogenous in the sense that it is, by definition, a social phenomenon; individual features do not belong to it. 'Parole', the use of language, is related to the individual speaker. The real topic of linguistics (i.e. so-called internal linguistics) for Saussure is the inner system of linguistic relations defined as a social phenomenon, i.e. autonomous and separated from individual peculiarities and usage. Accordingly, speech (language use) and all facts connected with it come within the scope of so-called external linguistics; thus context and linguistic variation (regional, social or stylistic varieties) do not belong to the topics of internal linguistics.

Saussure held that language is of a homogeneous nature insofar that while through its units, the signs, a connection is established between the flow of sounds and the flow of thoughts (as substantial things), language itself is of no substantial nature, but a relation between the two flows, and is in this sense a pure form.<sup>4</sup> (Yet in modern research into grammaticalization, as we will see, it is the linguistic substance, the simultaneous change of sound sequences and meanings, that play an important role, cf. Bybee – Perkins – Pagliuca 1994: 1–2.)

Finally, the homogeneity of language also appears to Saussure in that he wishes to describe a linguistic system as a language state, not paying attention to the historical processes that have shaped the phenomena of the system. The reason for this is that in the Saussurean concept historical changes are not systemic; systemic relations (oppositions, i.e. linear and associative relations) can be traced only among things existing simultaneously. That is, in language state, synchrony. Language state is a phase in the life of language where changes are minimal, that is to say the synchronic system is static or motionless. According to Saussure, the task of linguistics is to research this synchronic system and explore its structure.

The structuralist tendencies emerging between the two world wars studied the modeling and description of linguistic structure in different ways (the glossematic school in Denmark and American descriptive linguistics somewhat rigidly, the Prague and London Schools more flexibly<sup>5</sup>), yet roughly on a common basis. The Saussurean concept of lan-

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<sup>4</sup> A similar idea is already present in Humboldt's works written at the beginning of the 19<sup>th</sup> century.

<sup>5</sup> The concept of the Prague School differs sharply from the Saussurean views. For example, instead of opposing synchrony and diachrony, Jakobson and his followers aimed

guage and of its linguistic research outlined above (or, at least, some of its connections) in structuralist tendencies (and partly in models of linguistic theory rooted in them: see later) served as a basis for to push on usage along with linguistic contexts, usage situations, linguistic functions, variations and language change into the background. Besides this, in American descriptive linguistics some aloofness from semantics also occurred.

All these tendencies formed a rather unpleasant background of linguistic theory for research into grammaticalization, since in these studies the aim is to monitor the processes of changes, in which usage realized in both linguistic and situational contexts as well as (related to this) variation, semantic change preceding category shifting, and functional shifting play a major role (cf., e.g., Hopper 1991).

### **3. Structural and functional tendencies**

So far I have been speaking about modern language theories and modern tendencies of linguistic theory in plural, everywhere, wishing to illustrate that linguistic theories undergo changes not only in time: the end of the 20<sup>th</sup> century and the beginning of the new millennium are characterized by the competition of several different models of linguistic theory suggesting alternative methods of explanation and description.<sup>6</sup> As aforementioned different tendencies of linguistic theory may be classified into broader categories on the basis of how they are related to the Saussurean concept, i.e. what answer they give to the essential question of what should be modeled by a linguistic theory and how.<sup>7</sup> In this context, several questions arise, such as:

- should we study only linguistic structures (linguistic forms) when making a model, or also linguistic functions?
- should a linguistic theory model usage (and other related facets)?
- should linguistics study language as a pure form, or is the research on linguistic substance (sounds, meanings) also essential?
- how should synchronic and diachronic approaches be linked to each other?
- is linguistic state static? etc.

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at proving the systematic nature of linguistic changes, thus establishing a kind of unity of synchronic and diachronic research.

<sup>6</sup> Undoubtedly, among these models of linguistic theory, Chomskyan generative grammar had, and has, a unique role, partly because the decisive theories of linguistic theory were being developed within its framework for decades, and partly because dissimilar alternative tendencies defined themselves as compared with Chomskyan theory. However, I would like to put this tendency in broader parameters as well.

<sup>7</sup> Actually, these two questions cannot always be separated from each other.

Based on the answers to the first two – perhaps most fundamental – questions, two main tendencies can be distinguished: the so-called structural (or formal) and the functional. The structural tendencies model linguistic systems, that is, linguistic forms and structures, independently of usage, in an autonomous way, while functional models try to define linguistic forms and structures taking into consideration their linguistic function and usage. (It goes without saying, the classification under these two main tendencies is vague; a detailed study of particular theories may show that, on the one hand, there can be similarities even between schools belonging to different main tendencies, on the other hand, inside one tendency there may be essential differences between specific approaches – thus this categorization should not be used strictly).<sup>8</sup>

In connection with the terms, or, concepts the following comments should be made:

1. The label ‘structural’ does not have the same meaning as ‘structuralist’, because the latter is used to indicate the linguistic tendencies between the two world wars.
2. The expression ‘formal’ should not be understood in the technical sense; it is no formalization as a descriptive technique. ‘Formal’ as a quasi-synonym of ‘structural’ denotes that in this tendency linguistic structure, that is, linguistic form is at the center of attention.
3. The expression ‘functional’ is used in various meanings in linguistics. The concept used here does not cover the concept of functionalism accepted in grammars of structural view, which is used either in the mathematical sense (as function), or as a grammatical function (e.g., subject, predicate, object in LFG, i.e. lexical-functional grammar). On the other hand, some extend the concept ‘functional’ to infinity: according to them all approaches, if not structural, are functional; the dangers of this view were pointed out by Givón (1995).

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<sup>8</sup> Some other questions, along which inside the two mainstreams different approaches can vary are:

- what parts should linguistic theory consist of, and how are these parts related (what is the hierarchy between them like: e.g. syntax – semantics – pragmatics, or vice versa: pragmatics – semantics – syntax; i.e. is it possible to distinguish parts: modular or holistic concept)?
- should the universal, typological and/or language – specific properties of language be modeled?
- should the model be based on the rule principle or the network principle?
- technically, in what way and by what means should the modeling take place (formalizing or something else)? etc.

4. Not leaving the framework, here I use the concept of functionalism in a narrower and a broader sense, dividing them by the terms 'functional' and 'of functional attitude'. In this paper (following Dressler 1995), in a broader sense, I call all linguistic tendencies "of functional attitude" if they examine functionalism inside the framework of action theory, as a concept connected with people's purposeful activity. Consequently, tendencies of functional attitude note the indirect, yet important, role of the two basic functions of language: communicative and cognitive, as well as of functions related to systemic connections (e.g., of the basic distinctive function or of other functions that can be linked to the behavior of different linguistic levels: for more details see Dressler 1995) in the process of the formation, work, and acquisition of structures. (These tendencies are the rivals of structural/formal models.) Inside the tendencies of functional attitude I call some 'functional' in a narrower sense; these tendencies build their model of linguistic theory expressly on the communicative function of language. (In Dressler's article of 1995, this is the so-called 'linguistic functionalism'; such types of grammar are both Michael Holliday's and Simon Dik's functional grammars; cf. Halliday [1978, 1994] and Dik [1991, 1997].)

In the second half of the 20<sup>th</sup> century, the structural/formal approach in linguistic thinking, that is, in different tendencies of linguistic theory, was assigned more weight than the functional, and had a dominant influence – especially through the Chomskyan generative grammar, i.e. different variants thereof. From the 70s up to the 90s (while the conception of the autonomy of linguistics was pushed into the background, and questions of usage came to the fore), more and more tendencies of functional perspective emerged, or strengthened, and in our days the superiority of the tendencies of structural perspective is no more unambiguous.

#### **4. The Chomskyan conception of language as a structural model<sup>9</sup>**

In the past decades, the most influential variety of linguistic theories of formal perspective or formal linguistic theories was the Chomskyan trend of generative grammar following the Saussurean view (directly the tradition of the descriptivist, the Bloomfieldian variety of structuralism), yet giving it up at the same time.<sup>10</sup> It follows the structuralist tradition

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<sup>9</sup> I emphasize again that the expression 'of structural perspective' should not be identified with 'structuralist', because this latter is used to indicate the linguistic tendencies between the two world wars.

<sup>10</sup> As noted before, the Chomskyan generative grammar is not the only one; notwithstanding, it is one of the most significant of structural perspective/formal linguistic tendencies, since in the last third of the 20<sup>th</sup> century all other tendencies defined themselves in relation to it. The generative linguistic theory itself underwent great changes from

to the extent that it regards language as an autonomous system whose structure may be explored synchronically. Usage (*parole* in the Saussurean terminology, *performance* in Chomsky's wording) is excluded from the model of linguistic theory; nor does it study linguistic variation, its aim being the modeling of linguistic knowledge: the competence of the 'ideal' speaker-hearer. Inside linguistic knowledge, it emphasizes grammatical knowledge: it is the modeling of this innate knowledge, especially of syntactic knowledge, that stands at the center of several varieties of the Chomskyan model of linguistic theory. In the first place, the model in its semantic component (which is secondary to grammar) represents the meaning of the sentence, particularly the meaning connected with, and arising from, the structure of the sentence with the help of formal semantics.<sup>11</sup>

Despite the above, the Chomskyan model differs greatly from the Saussurean. It operates not with static relations, but sets up a dynamic model (built on subsystems, so-called modules, regulated by principles and rules of its own), in which the substantial relations are not directly given, yet are expressed in the underlying hypothetical (deep or initial) structures. The model is characterized by a large-scale generalization, universalism and (e.g. opposed to the empiricism of Bloomfieldian descriptivists) rationalism. In this model, the universal nature of grammatical structures in the deep structure is explained by an innate language-learning apparatus (LAD = Language Acquisition Device): grammatical knowledge is 'wired' in our brains, but not all 'switches' are on. Besides the initially set (universal) parameters there are open parameters, open switches: these are set in the course of language acquisition, according to the typological characteristics of the particular language. Thus, according to the Chomskyan grammar, the essential (or core) phenomena of our grammatical knowledge are determined by universal and typological properties. Features characteristic of only a given language are supposed to be peripheral, and are not built into the model (cf. É. Kiss 1998). As this theory is a model of linguistic competence, and has no model of usage, the generative model has no pragmatic component.

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the Standard Version of 1965 to the latest version: the government and binding theory as well as the minimalist program (cf., e.g. Webelhuth 1995), and within the tendency of structural perspective and formal tendency several alternatives occurred – yet these tendencies are less interesting for our topic, and it is not possible to show them here, for lack of space.

<sup>11</sup> Owing to the preference given to formal (sentence) semantics, essential semantic relations – such as (non-systematic) polysemy or metaphorization – are excluded from the research topics of generative grammar. Formal semantics and the syntactic models used in computational linguistics are strongly based on mathematics and logic, are formal in a technical sense as well, and demand the formalization of worded relationships and rules. This requirement appears less rigidly in the main stream of generative grammar.



According to the generative conception, language is the ideal linguistic knowledge of the speaker-hearer; hence it follows that historical processes and the question of language change lie outside the scope of the basic model. Nowadays, research into change, among others, in studies of grammaticalization can be found even within the generative model (e.g. Roberts–Rousso, 2003). In this framework, grammaticalization is one of the types of parametric changes, i.e. the change of set parametric values (that is, features characteristic of grammatical or functional categories, e.g. Tense, Determiner, Complementiser), the cause of which is, supposedly, resetting in the course of language acquisition. In this conception, grammaticalization is, firstly, the restructuring of the sentence structure, more accurately, of the hierarchy of the functional heads, compared with which semantic changes are regarded as secondary.

## **5. Cognitive turn in linguistics**

In the Chomskyan model, among others, the Saussurean concept of the essence of language has changed as well. This model handles language no more as a social phenomenon, but (similarly to the opinion of the Neogrammarians) as the linguistic knowledge of the individual: language, by Chomsky's definition, is nothing beyond the linguistic knowledge and competence of the ideal speaker-hearer, that is, a phenomenon not of society, but mental, cognitive nature.<sup>12</sup> The task of the linguistic model is the modeling of this internalized language (I-language); the so-called externalized language (E-language), manifested in the course of the real use of language, is no subject of the model.

The shift ('social phenomenon' → 'cognitive phenomenon') connected with the definition of language, the appearance of the concept of language as knowledge, is called the cognitive turn in linguistics. It took place at the end of the 50s, and since then, i.e. Chomsky's debut, linguistics (along with psychology, neurobiology, and the study of artificial intelligence) has become part of cognitive science (cf. Kertész 2000). Notwithstanding, 'cognitive linguistics' is not used as a label to name the Chomskyan linguistics – it is tagged as 'generative (transformational) grammar'. The expression 'cognitive linguistics' has become accepted as the name for a new linguistic tendency, so-called holistic cognitive linguistics, which, though at some essential points broke away from the generative linguistic theory, also considered language as a kind of knowledge. (Later, in connection with this holistic cognitive linguistic

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<sup>12</sup> Chomsky's mentalism and rationalism are a natural reaction to the empirical concept of American structuralism, namely Bloomfieldian descriptivists, based on behaviorism.

tendency of functional attitude, we will return to the cognitive theory of language.)

## **6. Research into usage from different viewpoints and the pragmatic turn in linguistics**

Research into usage (and other questions connected with it) – as well as into alternative tendencies of linguistic theory, which try to obscure of the structural viewpoint for other reasons and will be outlined below – has come to the foreground, which may mostly be interpreted as a reaction to the shortcomings of the Saussurean and Chomskyan theoretical models. This tendency is connected partly with the emergence and spread of linguistic pragmatics, the so-called pragmatic turn in the 80s,<sup>13</sup> and partly with what had already occurred.

Thus, for example, research on language variants and variation, which is missing in the Saussurean and Chomskyan linguistic models, has been present in the Labovian branch of sociolinguistics, the so-called variational sociolinguistics (and even its precursors) since the 60s, which, as social (secular) linguistics, would like to become the alternative to the systemic linguistics (cf. Labov 1972). Nowadays, the study of variation plays a role in the theory of linguistic change: historical linguistics has incorporated into its theory Labov's theorem, according to which change always presupposes variation (cf. Bynon 1983).

Connected with the study of usage is also the research into verbal interaction and (partly) into units of greater magnitude than the sentence, which is, apart from the other branch of sociolinguistics, interactional sociolinguistics, also characteristic of 'sociologically inspired' conversational analysis based on ethnomethodology, of speech act theory and of 'philosophically motivated' discourse analysis (according to some ideas, subordinate to, according to others, encompassing, pragmatics). Studying units larger than the sentence, these tendencies have extended to context (or co-text), while studying verbal interaction, they have encompassed situational context and the speaker's communicative competence (see Hymes 1972), i.e. pragmatic abilities.<sup>14</sup>

Functional tendencies in the narrower sense also emphasize the communicative function of language – such as the aforementioned grammars of Michael Halliday or Simon Dik. In these grammars, the linguistic model is not restricted to mere description of grammatical

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<sup>13</sup> It is not my task here and now to show the (even short) history or characteristic concepts of pragmatics, i.e. linguistic pragmatics. For the summary of the topic see, among others, Renkema (1993) and Verschuere (1999).

<sup>14</sup> For a short summary of these tendencies, see Schiffrin (1994).

knowledge. Language is regarded as something dependent on usage, and even grammar is subordinate to pragmatics, that is, the discipline of language use: all this gives a comprehensive framework of linguistic theory into which the grammatical model should fit.

That grammar is placed in this framework of usage/pragmatics and that usage as a behavior determined by cognitive, social and cultural factors has become central in linguistic studies (cf. Barlow – Kemmer (eds.) 1999, Verschueren 1999) mirrors the pragmatic turn of linguistics in the 80s, as well as the further influence of this change of attitude.

While in Chomskyan linguistics the cognitive turn, compared with the Saussurean basis, means that the model, though keeping to the thesis of the autonomy of language and its independence from usage, abandons the idea of language as a social phenomenon; the models exhibiting the features of the pragmatic turn accept the social nature of language and reject the idea of linguistic autonomy.

Besides linguistic pragmatics, which developed in the 90s, all these research tendencies, sometimes affecting, sometimes intertwining with it, played an increasingly principal role in linguistic thinking and studies (cf. Dér 2002).

Linguistic functions, linguistic variation and usually language use play an essential role in modern-attitude research into grammaticalization as well. At some points, they are mostly connected with pragmatic studies, several authors assigning an important function to some pragmatic issues, too, besides semantic ones (cf., e.g., Hopper – Traugott 1993). Discourse analysis is also connected with research into grammaticalization at one point. One of the initiators of discourse-based grammaticalization explorations is Paul Hopper, in whose theory grammar is no prerequisite for discourse, but an emergent system taking shape during interaction. According to him, grammaticalization itself is nothing other than a move towards the consolidation of the structure by conventionalizing the patterns during discourse (cf. Hopper 1998).

## **7. Tendencies of functional attitude**

The forerunners of today's tendencies of functional attitude can be found in the pursuits of anthropological linguistics (Malinowski, Sapir) and in some trends of structuralist tendencies between the two world wars, especially in the works of the Prague structuralists (Jakobson among them). This shows that the functional view does not mean the denial of the structural nature of language; research of functional attitude may maintain the structural study of language – only not autonomously, but in a broader connection (cf. Dressler 1995, Tomasello 1998, Newmeyer 1998, Barlow – Kemmer (eds.) 1999). Yet these tendencies of

functional attitude differ from each other in what kind of relationships they consider crucial, or on which function of language they place the stress. In the following paragraphs, I am going to give a short outline of some variations of the models of functional attitude (the so-called holistic cognitive linguistics as well as the European and American varieties of natural linguistic theory), considering aspects that may, directly or indirectly, be connected with research into grammaticalization, their standpoints or, maybe, their methods.

### **7.1. Holistic cognitive linguistics**

In connection with the cognitive turn of linguistics the so-called holistic cognitive linguistics, usually labeled ‘cognitive linguistics’, has already been mentioned (the tag ‘modular cognitive linguistics’ belonging to the semantic theories related to the generative approach, cf. Kertész 2000 and Kiefer 2000).

The holistic tendency – in contrast to the Chomskyan view of language – is one of the linguistic models of functional attitude. The attribute ‘holistic’ means that, as opposed to the modular conception of generative grammar where the whole is constructed from autonomous subtheories, this model denies both the independence of language from different types of knowledge and the separate linguistic components that can be described independently, i.e. the modular structure of language (and of the linguistic theory modeling it) – thus, for example, it refuses to grant the autonomy of grammar or syntax, which play a crucial role in the Chomskyan model. The attribute ‘cognitive’ also indicates partly that in this approach language is a kind of knowledge (in which this model equals that of the Chomskys, yet its other bases differ radically), that is, out of the several functions of language, this tendency emphasizes the cognitive one (having a role in cognition).

In holistic cognitive linguistics meaning identified with conceptualization (building concepts, making experience conceptual) takes on an important role. Regarding the interconnections expressed in language, this model emphasizes the base of experiences and the attitude manifested in them.<sup>15</sup>

The holistic cognitive model (cf. Langacker’s all-encompassing works published in 1987 and 1990, and a book outlining the characteristics of

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<sup>15</sup> In this sense, this tendency can be related to the linguistic approach of two Hungarian researchers, János Zsilka and Sándor Szilágyi. N. cf. Zsilka (1975, 1978), Szilágyi (1996). Modern Hungarian holistic cognitive linguists (with the exception of the young researchers of Kolozsvár, working under the guidance of Sándor Szilágyi N., cf. <http://mnytud.arts.klte.hu/szilagy>) follow different branches of the American school (e.g. Zoltán Kövecses 1998, 2002, Péter Pelyvás 1997, 2002, Gábor Tolcsvai Nagy 1998, 1999).

the tendency by Ungerer – Schmid 1996) exposes the contents expressed by language as spatial relationships of (concrete or abstract) entities inside a cognitive domain, which can be two- or three-dimensional, yet also mental space. The semantic value of the linguistic expression reflects the content of the situation comprehended, as well as how this content is structured and construed – this is where several languages differ from each other. This model emphasizes the connection or wholeness of language and knowledge about the world (otherwise, linguistic and encyclopedic knowledge) and, accordingly, of semantics and pragmatics, and the embedding of language in culture.

Formalization is alien to this framework, and, owing to the complexity of the subject to be described, is not thought to be possible; instead, an attempt is made at exploring conceptualization through cognitive models, or notional schemas. Nor is deep structure used, as the difference between linguistic structures is considered as a difference in attitudes: the embedding of singular languages into a given culture determines what kind of conventionalized cognitive schemas are used to express several languages.<sup>16</sup>

In the linguistic expression of conceptual content, the role of attitude is shown by the concepts of figure–ground (or, from a different viewpoint, trajector–landmark) borrowed from Gestalt psychology, by salience and profile within the cognitive domain, etc. Attitude and conceptualization also play a role in conceptual metaphor theory in the center of semantic theory (cf. Lakoff–Johnson 1980, Lakoff 1987, Kövecses 2002), as well as in the theory of blend (functioning in mental domains) (cf. Fauconnier–Turner 1996, Fauconnier 1997, Grady – Oakley – Coulson 1999).

Researchers subscribing to the holistic cognitive approach do not accept the classical Aristotelian principle of categorization based on necessary and sufficient conditions. Separating scientific categorization (expert categories) from everyday (folk) categories, they consider the prototype principle and the principle of family resemblance to be characteristic of everyday categorization.<sup>17</sup> Similarly to everyday categories, lin-

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<sup>16</sup> At this point, holistic cognitive linguistics is connected to the so-called constructional grammar (cf. Goldberg 1995) and frame semantics (cf. Lehrer – Kittay 1992) as well.

<sup>17</sup> From the 1960s, in cognitive psychology, there arose a problem: there are phenomena whose demarcation from each other, or division into classes (categories), may create difficulties. The study of color terms and shapes has led to the concept of prototype, which has come into use in everyday description (such as fruit, furniture, vehicle, bird, etc.) as well. According to cognitivists, the categories have central units with the most universal features of a given category: these are the prototypes of the category in question (e.g. apple or orange in the fruit category). At the same time, there are less typical units (hen or ostrich as compared with the prototypical sparrow or pigeon); there may be units, too, that share only a few common features of the other members of the group: they can be found on the periphery and have several features, which make them related to other categories (e.g.

guistic categories are organized on the principle of family resemblance, and have prototypical and less prototypical members, and the boundaries between the categories are unclear and difficult to demarcate (cf. Taylor 1989).

The theory of holistic cognitive linguistics has enriched grammaticalization theory in many ways. For example, in modern research into grammaticalization it has become a radical idea that grammaticalization is influenced or motivated by extralinguistic processes, chiefly cognition. Grammaticalization researchers mostly agree that in the source structures of grammaticalization, source concepts refer to the basic part of human experience, and are chiefly expressions serving with a concrete reference point in human orientation (see, for instance, the connection between the names of the parts of the body and spatial orientation). It seems that these bases of grammatical meanings do not depend on culture, or linguistic and ethnic boundaries. On a vast typological random sample (of data from 67 languages, genetically and regionally layered), Bybee, Perkins and Pagliuca illustrate that grammaticalization takes place using similar source materials, along similar paths, by way of similar general mechanisms: this may contribute to the common cognitive and communicative patterns behind usage (Bybee, Perkins and Pagliuca 1994: 15; Heine, Claudi and Hünemeyer also share this view, cf. Heine – Claudi – Hünemeyer 1991: 33).

The theory of meaning of holistic cognitive linguistics has also been fruitful in research into grammaticalization. Earlier, it was commonly held (and some linguists are of this opinion nowadays, too) that in the process of grammaticalization there occurs a one-sided process, called semantic generalization (that is, the loss of semantic specifications, the separation of abstract content from lexical content). In his so-called 'loss-and-gain' model of 1988, Sweetser pointed out that in grammaticalization, meaning change has another aspect as well: in the forming grammatical meaning not only the loss of earlier meaning specifications can be observed, but also semantic enrichment, because in this process – through the contact of the visual schematic structure of the lexical and target meanings – the meaning of the target domain is added to that of the abstract unit. Jo Rubba, who studies the 'nominal to preposition' change involving the names of the body in Modern Aramaic, shares a similar view (Rubba 1994: 81–101).

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in the furniture category, compared with the prototypical table or chair, the piano is not only thought of as a piece of furniture). Categories are built up on the basis of family resemblance, which means that it is unnecessary to define a common feature (or several features) shared by each and every member of the category – it suffices to have among them at least two members manifesting each feature in question.

The 'rehabilitation' of metaphor, metonymy and generally creative semantic operations in holistic cognitive linguistics had a liberating effect on grammaticalization research. Contrary to the widespread opinion in formal linguistics that metaphORIZATION (and other creative semantic processes) are offenses, deviations, and as such are not subject to description, researchers in grammaticalization again emphasize the role of these semantic phenomena; moreover, on the basis of holistic cognitive linguistic approach, some authors even assign a central role to metaphor in grammaticalization mechanism (see Heine, Claudi and Hünemeyer 1991: 45–64, 70–97, 98–113).

The idea that categorical boundaries in grammaticalization research are indistinct appears in an approach to the grammaticalization process as a continuum: according to this opinion, the boundaries between the phases of the process are not clear-cut, and unambiguous separation is always arbitrary (see the aforementioned works).

## **7.2. The European variety of natural linguistic theory**

Natural linguistic theory, based on functional approach in the broader sense, which was being formed in the German-speaking lands, is a multilayered linguistic theory, in which besides universal and typological features as well as the modeling of linguistic system, sociolinguistics (as usage) and psycholinguistics (as individual use of language) also play an important role: the latter is mainly studied in relation to language acquisition, aphasia, and poetic language. On the theoretical level, the universal, typological and systemic aspects of natural linguistic theory are chiefly elaborated; in the latter, mostly phonology, morphology and text or discourse analysis (cf. Dressler et al. 1987, Tonelli and Dressler 1993).

Contrary to the strict system of rules used in formal grammar of structural attitude, in natural linguistic theory, universal grammar is a preference theory, in which universal principles predict which structures enjoy advantage over others in certain languages (that is, which structures are preferred by speakers).

The universal preference theory of natural linguistic theory (based on Jakobson's markedness theory) is a set of principles and restrictions. The general principles of this theory are based on human perception: less marked (or else, more natural) is what is easier to perceive, which depends on to what extent a phenomenon is expected or exceptional. Exceptional phenomena are less natural (or differently: marked), and thus may be perceived with more difficulties than expected ones. (Naturalness or unmarkedness in this model is not a value, but a relational concept,

which means that a phenomenon is always placed on a naturalness-scale compared with other phenomena.)

The markedness theory of natural linguistic theory has some important principles: one of them is the principle of biuniqueness, i.e. the one-to-one correspondence between two sets of things (one form – one meaning),<sup>18</sup> and the principle of iconicity and transparency.<sup>19</sup> A linguistic unit is structurally iconic, in case its structure on the expression level formulates its structure on the content level, and it is (semantically and morphologically) transparent, if its meaning can be predicted on the basis of its components, and is structurally transparent. (Besides general principles, also minor universal principles play a part, e.g., phonetic iconicity, indexicality, binarity, or optimal word-length.) If the linguistic unit is unmarked from the viewpoint of the general principles above, we call it maximally unmarked or natural, otherwise, it is considered to be more or less marked (cf. Mayerthaler 1987). The degree of markedness in several respects may be different; furthermore, some viewpoints may come into conflict. (For example, grammatical forms following the one-to-one correspondence principle are usually longer than the optimal word-length, and thus, from this point of view, are not maximally unmarked, cf. Dressler 1999b).

In natural linguistic theory, the relation between universal principles and linguistic system differs from that which we find in formal/structural generative grammar, according to the theoretical model of which universal and typological rules unambiguously determine the system of a given language. In his studies of German inflectional morphology, Wurzel (1987, 1989) pointed out that the principle of system congruency and of the stability of morphological classes (both of them depend on the system, so they are not universal) is on a higher level in the hierarchy of naturalness principles than system-independent universal principles: if they come into conflict with each other, it is always the system-dependent principles that win over universal preference principles. The supposed reason for this is that the speakers of a given language always prefer morphological phenomena which are intuitively more 'normal' to them than others. The concept of normality is only partly covered by universal principles of naturalness, since it depends on the speakers' own linguistic experiences, that is, the structural features characteristic of a given language: for the speakers of the language what is dominant in the

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<sup>18</sup> Owing to its attempt at being economical, in the case of lexical units this principle is applied extremely rarely: with the exception of terms, the bulk of words are polysemic. Co- and multi-functionality is frequent in the case of grammatical morphemes as well.

<sup>19</sup> These principles are based on Peirce's semiotics, cf. Dressler 1999a.



linguistic system and determines the structural typology of the language is considered 'normal'.

Natural linguistic theory is in many respects based on the prototype concept of holistic cognitive linguistics.<sup>20</sup> On the one hand, this model tries to describe not the ideal speaker's, yet the prototypical speaker's linguistic knowledge, and this prototypical speaker is not only, as Chomsky's ideal speaker, biologically determined, but also socially and culturally. On the other hand – similarly to holistic cognitive grammar – it imagines linguistic categories as having not only prototypical, but also more or less peripheral specimens, that they may be placed on a scale, and that the category boundaries cannot be precisely defined (cf. Dressler 1989).

Contrary to the concept of holistic cognitive grammar, natural linguistic theory accepts the modularity of language, but only regarding developed, acquired language, since it rejects the idea of innate universal grammar in the Chomskyan model. (Language development, or acquisition is supposed to be a string of dissociative processes on constructivistic base in the framework of natural linguistic theory.)

In connection with grammaticalization, ideas concerning language change should also be mentioned. In natural linguistic theory, language changes in the optimum case advance from less natural (or more marked) towards more natural (or less marked). Yet regarding universal principles, this is not always the case, because principles on the systemic level are more decisive: universal principles are limited by typological features, and typological features, by the characteristics of the given linguistic system. Accordingly, the direction of linguistic changes does not always fulfil the universal criterion of naturalness; often the direction of linguistic change shows the triumph of the criteria of naturalness on the system level, contrary to the universal principles. In other words, in the process of linguistic change there can appear constituents which are more natural from the viewpoint of system congruence, yet less natural from the universal standpoint, than their linguistic antecedent.

A relationship can also be established between grammaticalization and an aspect of the morphological concept of natural linguistic theory, which deals with the motivating function of the morphological level: in the case of morphologically complex linguistic units the structure undertakes a role in motivating the meaning of words and word forms, that is, in 'calculating' word meaning and, secondarily – in view of the role of the word in sentence structure – sentence meaning as well. Grammaticaliz-

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<sup>20</sup> For the relationship of holistic cognitive linguistics and natural linguistics, see Winters (1993), for the prototype principle in holistic cognitive linguistics and natural linguistics theory, cf. Dressler (1990).

ation, if based on morphologically complex units, is often accompanied not only by the loss of semantic transparency, but also by the loss of formal transparency, because grammaticalization presupposes not only semantic change: it is a sum of interrelated functional, semantic, grammatical, and phonologic changes. In these cases, the lack of transparency entails the loss of morphological motivation, yet simultaneously, through the shift into another class of the system, the unit belonging to a new category may, as part of larger units (on another level and in another way), take part in motivating the structure of linguistic units. (For example, in Hungarian the ‘suffixed noun → adverb → verbal prefix’ type grammaticalization process is accompanied by the loss of semantic (and formal) transparency; at the same time, the unit that has entered the verbal prefix category, in the morphologically complex structure ‘verbal prefix + verb’, can also contribute to the semantic and formal motivation, cf. Ladányi 2000.)

### **7.3. The American version of natural linguistic theory: J. Bybee<sup>21</sup>**

In her work of 1985, contrary to the autonomy of grammar (independence from meaning) and the apparent arbitrariness of morphological expression – based partly on the Jakobsonian markedness theory, and partly on Sapir’s hypothesis<sup>22</sup> (of the correlation between linguistic unit and its expression) – Bybee searches for a connection between morphological expression and meaning. Her basic hypothesis, which is formulated as a general explanation of different phenomena, is the so-called relevance principle, according to which the degree of morphophonemic fusion of an affix with a root is related by correlation to the semantic relevance of the affix in comparison with the root. On the basis of relevance, inflectional categories (which differ from both lexical and syntactic phenomena) may be arranged along a scale, and also predictions can be formulated as to which categories in different languages will be of more lexical, derivational or inflectional frequency. Arising from this, (as the European variety of natural morphology does) Bybee also holds that the difference between inflexion and derivation is gradual. She asserts alternation cannot merely be described on a phonological basis, because, in her opinion, it also reflects the relations between the forms, i.e. the structure of paradigms: relationship of the unmarked basic forms and the

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<sup>21</sup> In the American version of natural linguistic theory, constructional grammar and frame semantics along with the holistic version of cognitive grammar, Noonan considers a coherent linguistic theory and summarizes it under the name ‘West Coast Functionalists’.

<sup>22</sup> According to Sapir, material content, or lexical meaning, is usually expressed by roots and stems, relational content, or grammatical meaning, or by affixes (yet it differs from language to language what is considered material and what is not).

more marked, less basic ones, or the degree of this relationship. According to Bybee, these irregularities can be explained by the fact that speakers do not always analyze even morphologically complex forms on the level of acquisition, storage, and access; the relatively more frequent forms can function as wholes.

In this work, Bybee supports her ideas with data from 50 languages. What she writes about the difference between the expression of inflectional categories projects her later opinion about grammaticalization: she holds that the differences in expression go back to the historical difference of the sources of signifiers; inflectional categories come into being by the semantic and phonological reduction of complete lexical units, via their simultaneous diachronic comodification.

Bybee (1985, 1988) – following Rumelhart and McClelland, on psychological considerations – argues for a connectionist approach to morphology, because, in her opinion, lexical rules have no existence of their own abstractedly from the lexical units where they can be used. Rules are nothing other than schemas which are extracted from lexical units with similar semantic and phonological properties stored in the mental lexicon. The strength of the representation of the sample in long-range memory is determined by how many lexical units belong to it. (Thus, in this approach storage plays a key role.) Transformational rules do not exist independently; they coincide with the places of the memorized units in the mental lexicon. Accordingly, everything is decided in the lexicon through lexical selection, analogy is a means of morphological creativity. If no independent existence is attributed to rules, and they are considered as rules being shaped in the course of usage, on the basis of analogical relations, then the mental activity of the language-users may be modeled on the usage level, and the results may be supported by testing as well. In the network model, the stress is shifted from the system to the use of the system.

An image of Bybee's approach to grammaticalization can be acquired mainly from Bybee, Perkins and Pagliuca (1994). Several aspects of this book have already been mentioned above elsewhere. Regarding holistic cognitive linguistics, it has been remarked that contrary to the concept of language as an autonomous system, they also think (as do other authors) that grammaticalization is influenced, or motivated by extralinguistic processes, especially cognition (cf. Bybee – Perkins – Pagliuca 1994: 15).

While in structuralist or generative models categories are discretely separable units, grammaticalization is considered by Bybee, Perkins and Pagliuca as something constituting a continuum, in which boundaries are opaque, and unambiguous separation is to some extent always arbitrary.

Contrary to the Saussurean statement that language is pure form and no substance, they think that it is the linguistic substance, more precisely, the dynamic comodification of semantic and phonological material that is decisive in grammaticalization, and on the same basis they attribute less importance to system and structure than to substance: in their opinion, system or structure is the product of substance rather than its producer (cf. Bybee – Perkins – Pagliuca 1994: 1–2).

Instead of the priority of synchrony, or the distinction between synchrony and diachrony (when the two approaches exclude each other) they vote for the diachronic one (Bybee – Perkins – Pagliuca 1994: 1, 4). (Differently, Heine, Claudi and Hünemeyer, using the concept of ‘panchronic grammar’, reinterpreting Saussure’s panchrony and following the Prague linguists and the Italian neorealists, claim the unity of synchrony and diachrony, cf. 1991: 248–261.)

It should be also mentioned that against the ‘one form–one meaning’ principle Bybee and her co-authors (as well as other authors) consider polysemy and the layering of (grammatical) meanings to be of crucial importance (Bybee – Perkins – Pagliuca 1994: 21–22). Disagreeing with the statement popular in formal linguistics, namely that metaphORIZATION (along with other creative processes) is a deviation, exception, and therefore no subject to the description, they emphasize the role of creative processes in grammaticalization (especially taking into consideration its first phase, unlike Heine and his co-authors).

## 8. Summary

My aim was to sketch the background of modern research into grammaticalization, to give reasons why this previously ignored research area came to life in the 1990s again. In this framework, only the most important tendencies were stressed so that some conclusions could be drawn.

The starting point of my chain of ideas was that the time of spectacular advance of research into grammaticalization is no accident: in the background of this boom there stand changes in linguistic thinking, and new tendencies of linguistic theory.

On the example of some modern linguistic theories, I tried to show the characteristic features of linguistics at the end of the 20<sup>th</sup> century: besides and contrary to the linguistic models of formal/structural approach that had been the single one before, new alternative tendencies of functional attitude appeared, gained ground, and strengthened, questioning the basic principles of models of structural attitude.

As a summary, I would like to point out some crucial moments of the characteristics of the new tendencies of the end of the century (which

were detailed earlier). In these tendencies (contrary to the 'langue'-level competence models which do not study the functions and varieties of language, and are independent of usage), the cognitive, cultural and social embedding of language, in general, language use, attains an important role, thus the concept of language as an autonomous system is questioned. With usage at the center, linguistic pragmatics develops and gets revalued. Instead of the priority of synchrony or the strict separation of synchrony and diachrony, arises the impossibility of dichotomy between synchrony and diachrony (e.g., with the Jakobsonian concept of dynamic synchrony). It also becomes doubtful that the study of language as a pure form is primary, above the study of language substance (sound and meaning). At the end of the 20<sup>th</sup> century, as opposed to the grammar- and sentence-centeredness of formal models, the study of units larger than sentences and (lexical) semantics gradually gained an important role. Instead of the discrete separation of categories, categorization based on prototype and family resemblance, on which boundaries are blurred, and unambiguous separation is always arbitrary to some extent, came into the limelight. Metaphorization and other creative processes excluded from modelable phenomena in formal theories, become parts of the linguistic model again. Contrary to the modular structure of language, in some tendencies the holistic concept of language also gains ground.

The appearance and development of alternative linguistic theories is accompanied by the 'rediscovery' of viewpoints and fields neglected earlier, whose emergence has been favorable to the modern approach of grammaticalization research.<sup>23</sup>

Surveying the linguistic trends of the end of the 20<sup>th</sup> century, the question arises: where today's linguistic theory goes, and what this can mean from the viewpoint of the future of research on grammaticalization. Does it take over the role of decisive linguistic model from Chomskyan model, and if so, which one, one of the structural or functional linguistic models, which is traditional nowadays, or a model of functional approach considered alternative compared to them? In other words, will there be a paradigm shift in linguistics?

According to some, this shift has already taken place: the dynamic development and worldwide spread of holistic cognitive linguistics seems to support this opinion.<sup>24</sup> In any case, there is no denying that the turn of

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<sup>23</sup> More correctly, the new tendencies of linguistic theory serve partly as a background for the development of modern research into grammaticalization, and have also partly been enriched by the results of this research. Details concerning this were dwelt on above.

<sup>24</sup> Holistic cognitive linguistics (as already mentioned) borders on the so-called constructional grammar (cf. Goldberg 1995) and framework semantics (cf. Lehrer – Kittay 1992). Kálmán László (2001:17) considers constructional grammar in itself as a paradigm-shifting model of linguistic theory.

the millennium has brought forth the shaking of the structural or formal approach represented by the leading Chomskyan tendency, yet we have seen that the new linguistic trends of functional attitude do not necessarily imply the cognitive concept of language (see linguistic functionalism or natural linguistic theory).<sup>25</sup> In case we speak of a paradigm shift, then – in my opinion – it should not be searched in the replacement of generative grammar for holistic cognitive grammar (though seemingly and practically that is the case), yet in the change of structural or formal approach into functional approach (in its broad sense).<sup>26</sup> Holistic cognitive grammar, as pointed out above, brought something new into linguistic theory, not by being cognitive, because the cognitive turn in linguistics had taken place earlier, in Chomsky's achievement, but by diverging from the Chomskian theory at some points, i.e. where the structural approach was exchanged with the functional.

The functional approach is a comprehensive viewpoint, which does not exclude the systemic study of linguistic structure, and only places it into a broader relationship. These relations include all facets whose exploration is the most important task of research into grammaticalization. Also, functional approach spans a wide range of tendencies, thus making possible a variety of approaches. In case this attitude will be permanently present or become notably decisive in linguistics, it will provide a solid base and favorable background for research into grammaticalization.

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<sup>25</sup> Although, undoubtedly, among the modern functional models the best-known and most influential is the holistic cognitive model.

<sup>26</sup> See footnote 21.

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