

A MATTER OF PERSPECTIVE: VIEWPOINT PHENOMENA IN THE EVOLUTION OF GRAMMAR

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Language provides a variety of means to conceptualize objects, states, events, and abstract entities in different ways and from different perspectives. These so-called ‘construal operations’ play a key role in Cognitive Linguistics. With the example of construal operations pertaining to viewpoint and perspectivation, this paper aims to demonstrate how different theoretical and methodological approaches can be combined to yield a better understanding of how languages systematically make use of general cognitive capacities of perspective-taking, -setting, and sharing. These insights can in turn shed light on the evolution of specific grammatical phenomena as well as on the evolution of language more generally.

1. Introduction

Viewpoint phenomena are pervasive in language (cf. e.g. Langacker, 1996). Consider a sentence like *The next Evolang will be held in Vienna*. A spatial location is indicated with the help of the preposition *in*, and the future tense locates the event in time, which, together with the modifier *next*, also indicates the conceptualizer’s temporal stance between two Evolang conferences. The passive mode sets the agent ‘off-stage’ (Langacker, 1987), thereby limiting the conceptualizer’s viewing frame to the unfolding of the event itself.

Within the broader framework of Cognitive Linguistics, both Langacker’s Cognitive Grammar (cf. Langacker, 1987, 1991) and Talmy’s Cognitive Semantics (cf. Talmy, 2000) have pointed out the importance of dynamic meaning construal in linguistic communication. The notions of perspective and viewpoint figure prominently both in Langacker’s (e.g. 1987, 1991) typology of ‘construal operations’ and in Talmy’s (e.g. 2000) ‘schematic systems’ framework. We

propose that this view of language bears key implications for studying the evolution of specific grammatical phenomena as well as on the evolution of language more generally (Pleyer, 2012). Specifically, Cognitive Linguistics can contribute to specifying the cognitive processes which represent prerequisites for the evolution of language and for the dynamic process of meaning construal that characterizes linguistic interaction. In addition, there have been increasing efforts to verify central claims of Cognitive Linguistics on an empirical basis (cf. Janda, 2013). Corpus studies as well as experimental methods have been applied to investigate a broad range of grammatical phenomena. In sum, these studies, some of which we review below, have lent support to the Cognitive-Linguistic approach of conceptualizing language as a structured inventory of constructions at different levels of abstraction. These are seen to serve as ‘prompts’ for the embodied simulation of different kinds of entities (objects, events, actions, relations). Moreover, recent research in Cognitive Linguistics has emphasized the fundamentally social-interactive and intersubjective nature of language (e.g. Verhagen, 2005). These dimensions have also been stressed in much of language evolution research (e.g. Tomasello, 2008; Fitch, 2010). They also play a key role in the investigation of viewpoint phenomena and their evolution. Overall, these developments make Cognitive Linguistics highly amenable for interdisciplinary integration. This indicates that an incorporation of theorizing and results in Cognitive Linguistics into Evolutionary Linguistics promises to be a fruitful enterprise.

In the remainder of this paper, we will discuss two examples of grammatical phenomena tightly connected to viewpoint and perspectivation. First, we discuss aspectual framing (e.g. *What happend* vs. *What was happening*), which provides a prime example for the Cognitive-Linguistic hypothesis that the shaping and the ‘construal’ of a proposition is as important an aspect of linguistic semantics as the conceptual content of an expression (cf. Langacker, 1987). Then we turn to the phenomenon of ‘subjectification’, i.e. the process by which the conceptualizer’s stance is grammaticalized ‘into’ an expression. We then discuss how these linguistic findings can be linked up with what is known about perspective-taking capacities in humans and other animals. We conclude that by looking at these linguistic phenomena and the underlying capacities that support them from the perspective of Cognitive Linguistics and Evolutionary Linguistics, we can gain significant insights into the emergence of perspectivation in language and its role in the evolution of language.

2. Viewpoint Phenomena: Subjectivity and Aspectual Framing

Ever since its inception in the 1980s, Cognitive Linguistics has emphasized the key role of visual and spatial cognition in language. This follows quite naturally from the key Cognitive-Linguistic assumption that language has to be regarded as an integral part of human cognition and therefore as tightly interconnected with other cognitive systems. These hypotheses have been supported by a wide range of empirical research. For example, Zwaan (2004) presents evidence that in language processing, comprehenders construct experiential simulations of the described situation. Furthermore, a series of experimental studies suggest that language comprehenders represent object distance not only visually, but also auditorily (cf. Winter & Bergen, 2012). Another series of experiments lend support to the idea that grammatical person orchestrates the perspective from which an event or situation is simulated (cf. Bergen, 2012, pp. 110-114).

On a more abstract level, it has been suggested that a variety of grammatical phenomena can best be explained in terms of viewpoint phenomena. One of the most widely discussed and most thoroughly investigated viewpoint phenomena is grammatical aspect.

2.1. Aspectual Framing

Grammatical aspect provides a powerful means to conceptualize the unfolding of events in different ways (cf. Croft 2012, p. 4). According to Comrie (1976, p. 3), “aspects are different ways of viewing the internal temporal constituency of a situation”. Especially the variation between perfective and imperfective aspectual framing in English (e.g. *She played* vs. *She was playing*) has been widely discussed in Cognitive Linguistics. Cognitive Grammar characterizes aspectual framing in terms of viewpoint: In the case of the English progressive, “the position from which the situation is viewed is contained in the ongoing process itself (so that any boundaries are not ‘in view’)” (Verhagen, 2007, p. 51). Child language studies as well as experimental approaches have supported this view. Crucially, the ‘involved viewpoint’ plays an important role in the acquisition of progressive aspect: In child-directed speech, perfectively framed sentences tend to be used when the event denoted by the verb is still unfolding (cf. Ibbotson et al., 2013). Cook-Gumperz & Kyratzis (2001) show that in pretend play situations of 3- to 4-year olds, progressive constructions are tied to children taking an involved viewpoint on actions they take part in (e.g. *I’m making soup*). In experimental setups such as sentence completion or event description tasks, participants tend to describe situations in more detail when the sentence to be completed or the question to be answered are framed progressively (cf. Matlock et al.,

2012). Furthermore, Bergen & Wheeler (2010) show that progressive, but not perfect sentences about hand motion facilitate manual action in the same direction. This indicates that progressive aspect evokes a higher degree of ‘immersion’ of the conceptualizer.

The spatial nature of grammatical aspect becomes particularly obvious in languages in which spatial expressions have come to be grammaticalized as aspectual markers. Locative constructions are used for progressive aspect in a variety of both genetically related and unrelated languages, e.g. in a number of African languages, in French (*être en train de*), and in Dutch (*aan het V zijn*) (cf. Booij, 2008). The conceptualization evoked by the Dutch *aan het* construction has been addressed by Flecken & Gerwien (2013). More specifically, they investigate the interaction between participants’ duration estimations of progressive and non-progressive event descriptions and the inherent duration of the respective events. They found that “the progressive form *extends* duration estimations for *short* events, whereas it *shortens* the perceived duration of inherently *medium* and *long* events.” They argue that by means of progressive aspect, conceptualizers take an involved viewpoint by selecting a time interval that falls within the total duration of the event. Taken together, these results lend support to the hypothesis that both the acquisition and the comprehension of grammatical aspect are fundamentally grounded in physical reality and social interaction.

2.2. Subjectivity and Subjectification

Most Cognitive-Linguistic approaches attribute a key role to the conceptualizer, who figures prominently in expressions of attitudes and mental states. Traugott (1997) defines subjectification as the process “whereby meanings become increasingly based in the speaker’s subjective belief state, or attitude toward what is said”. For example, the epistemic uses of *promise* and *threaten* can be seen as cases of subjectification. A sentence such as *He promised to be stout when grown up* (Defoe, 1722, OED) obviously does not refer to a commissive speech act, as in *She promised to be home at eight*, but rather expresses the speaker’s belief of how the person referred to will look like in the future. For Langacker (1990), subjectification pertains to the degree to which a conceptualizer is construed as ‘offstage’. In a sentence like *I believe he’ll be stout when grown up*, the subject of conceptualization is explicitly mentioned and therefore, in Langacker’s terms, construed as ‘onstage’. In *He promised to be stout when grown up*, by contrast, the conceptualizer is grammaticalized ‘into’ the construction, as it were. Consequently, subjectification can be seen as tightly connected to perspectival

construal operations as it relates to the conceptualizer's vantage point and role in a viewing relationship (cf. Langacker, 1990).

The process of subjectification is a prime example of how the meaning of a linguistic construction can change over time due to the availability of different construal options and shifts in the prototypicality of these particular options. In the case of *promise*, only the performative reading seems to be available in the first stage of its development, while the various epistemic usage variants only develop from the 16th century onwards (cf. Traugott, 1997, pp. 186f.). In a usage-based model (Barlow & Kemmer, 2000), these processes can be modeled as reconfigurations of a complex semantic network.

3. Evolutionary Origins of Perspectival Construal Operations

From the point of view of Evolutionary Linguistics, the phenomena presented in the previous sections present us with the challenge to explain how the ability of dynamic perspectival construal in language and cognition evolved. More specifically, we can ask which precursors to these abilities can be found in nonhuman animals and how these capacities develop in ontogeny. Perspective-taking in humans is a complex skill which is based on a set of many interacting capacities and motivations. Some of these capacities and motivations are considered to be uniquely human, whereas others seem to be shared with other primates, especially the great apes. These can thus be seen as the evolutionary foundation or platform of the perspectival abilities underlying the emergence of viewpoint phenomena in language and cognition.

From around one year of age, human infants show the ability and motivation to share perspectives in direct engagement. The capacity to understand what others experience starts to develop a few months later and seems to be fully developed around 24 to 30 months. Understanding how another person sees something only seems to emerge around their third birthday, with the full-blown capacity to explicitly confront and reflect on different perspectives emerging around four years of age (Moll & Meltzoff, 2011). Many studies suggest that chimpanzees exhibit rudimentary forms of perspective-taking. That is, "chimpanzees, like humans, understand that others see, hear and know things" (Call & Tomasello, 2008, p. 190). Importantly, though, the structure of social perspective-taking and -setting in humans goes well beyond these capacities. Perspective-taking in humans can be conceptualized as a dynamical process of intersubjective, participatory sense-making, which is based on embodied interaction and the mutual incorporation of embodied perspectives (Fuchs, 2012). For example, humans do not only understand and take other people's perspectives, but, in

contrast to chimpanzees, they make use of their perspective-taking capabilities in a fundamentally cooperative, declarative, and informative kind of communication (cf. Tomasello, 2008). This means that the evolution of the human drive to share perspectives and psychological states with others – something which Fitch (2010, pp. 130f.) refers to as ‘Mitteilungsbedürfnis’ – was of fundamental importance in the evolution of language. The examples presented in section 2 demonstrate that certain features of human languages can be seen as crucially relying on this evolved human capability for dynamic perspectival construal both in the visual-spatial and in the socio-cognitive sense. In particular, we argue that perspectival construal operations play a key role in the evolution of grammar. One particularly striking development supporting this hypothesis can be found in Nicaraguan Sign Language (NSL). Over a very short period of time, this emerging sign language developed morphological devices for linking arguments with their respective verbs, which fundamentally rely on spatial contrasts (cf. Senghas, 2000). More precisely, signers of the second, but not of the first cohort use sign direction as a morphological device to express semantic roles. In doing so, signers of the second, but not of the first cohort consistently choose a character view representation, i.e. they represent the relative positions of the characters involved in the event to be expressed from the respective point of view of these characters (cf. Senghas, 2000).

4. Conclusion

The findings discussed above strongly suggest that the human perspectival drive and the socio-cognitive capacities connected to it play an important role in the emergence of perspectivation and viewpoint phenomena in language and cognition. This, we argue, is the most important aspect and function of language from an evolutionary and cognitive perspective.

Language and the perspectival construal operations of individual languages evolved as a means to conceptualize objects, states, events, and abstract entities in different ways and from different perspectives. These linguistic construal operations serve as prompts for the creation of embodied simulations. The overall capacity for linguistic perspectivation depends on general cognitive capacities. Most important among these is the human capacity for perspective-taking, -setting, and -sharing. From the point of view of Cognitive Linguistics and Evolutionary Linguistics, we thus have to further explicate how these capacities are tied to the phenomena of viewpoint and perspective in language. As we have shown above, understanding these capacities requires combining the insights to be gained from different approaches such as experimental studies, child language

research, comparative studies, and investigations into the historical evolution of fully developed as well as emerging languages. Moreover, investigating the evolution of these underlying capacities can in turn help provide a better understanding of grammatical phenomena such as those discussed in this paper.

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