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Positing grammatical categories: linguists' vs. speakers' generalizations

Comment on Boye 2009

Boye (2009) argues for a particular type of cross-linguistically valid grammatical categories, which he calls generic categories. Generic categories are categories encompassing conceptually related notions, e.g. present, past, and future, or epistemic and deontic. These can be described in terms of some more abstract notion that is used to define the category, such as tense or modality. Generic categories are standardly used in linguistic analysis, but a great deal of controversy exists about what generic categories exactly should be posited, for example about whether or not evidentiality can be regarded as a category in its own right. Boye argues that this is because proposals about generic categories are usually based on arbitrary notional criteria. Instead, generic categories should correspond to linguistically significant generalizations, that is, they should capture some organizing principle in the grammar of individual languages. In fact, Boye argues, generic categories are necessary in linguistic analysis exactly because they appear to play a role in a number of grammatical phenomena cross-linguistically. Claims about generic categories should be based on semantic maps, because the fact that the notions encompassed by a generic category cover a continuous region on a semantic map is evidence that the category corresponds to a linguistically significant, rather than a linguist's arbitrary generalization.

In what follows, I will argue that Boye's proposal, along with much of the current literature on grammatical categories, does not distinguish between two possible senses of the notion of grammatical category, and that this distinction is essential to a proper understanding of what evidence can actually be used to posit individual categories, including evidence from semantic maps.

In principle, grammatical categories can be conceived of either as a linguist's classification device, or as components of the grammatical organization of individual languages, as presumably specified at some level of mental representation. In the first sense, individual categories, e.g. tense or evidentiality, are labels indicating that a number of linguistic elements share some selected property. This is a descriptive generalization over observed grammatical patterns, which does not imply that the relevant elements form a class in a speaker's mental representation. In the second sense, grammatical categories are classes that have psychological reality, that is, they exist in a speaker's mind independently of a linguist's description of observed grammatical patterns.

Boye (2009: 2) claims that he regards generic categories as a linguist's theoretical construct, rather than cognitive entities with ontological reality. This suggests that he is using the notion of generic category in the descriptive sense, that is, to classify particular grammatical patterns, rather than to make hypotheses about a speaker's mental repre-

sentation. In this case, however, what generic categories (or grammatical categories in general, for that matter) should be posited for a language is basically a conventional issue which depends on what parameters are selected to define individual categories, and any parameter can be chosen provided that it is applied consistently.

Boye's claim that generic categories should correspond to linguistically significant generalizations implies that positing particular generic categories should not be a matter of convention, and these categories should rather play a role in the grammar of individual languages. There is however only one possible sense in which a category can be assumed to exist in the grammar of a language independently of a linguist's descriptive convention, namely, the category must have some form of mental reality for the speakers of the language. This may be either because the category is part of a speaker's mental representation of individual constructions, or because it plays a role in the diachronic processes that lead speakers to create particular contructions, even if it is not part of a speaker's mental representation of already attested constructions (see Dryer 1997 and 2006 and Cristofaro 2009 and to appear for detailed discussion of this issue).

Thus, if generic categories are assumed to capture linguistically significant generalizations, they must be assumed to have some form of mental reality. This assumption, in fact, has been explicitly rejected in previous proposals on the topic by Bybee (1986) and Bybee, Perkins, and Pagliuca (1994). Bybee and her associates observe that forms encoding meanings within the same semantic domain (e.g. tense, aspect, or modality) typically display different distributional properties, and conversely, forms with the same distributional properties may not express meanings in the same semantic domain. This, they argue, is evidence that there is no psychological organizing principle of language that is based on some generic category encompassing all of the notions in a particular semantic domain (although they do use generic categories to classify the forms encoding these notions). The question then arises as to whether or not the grammatical phenomena discussed by Boye are really evidence that particular generic categories are somehow part of the mental representation of the speakers of the relevant languages.

Boye's first argument for generic categories is that, in a number of languages, forms encoding notions within the same generic category do indeed display the same distributional properties (for example, Ngyambaa evidential clitics are characterized by specific ordering restrictions). These properties single out the forms as a separate class within the grammar of the language, which can be taken as evidence that the relevant generic categories (e.g., evidentiality) play a role in that grammar.

The fact that elements within the same semantic domain have the same distributional properties, however, does not mean that these properties are related to the corresponding generic categories. For example, it is well known that different forms within the domain of tense, aspect, or modality may all develop from verbs (Bybee, Perkins, and Pagliuca 1994, among many others). As a result, these forms may all be subject to ordering restrictions that reflect the position that verbs occupy or used to occupy in the clause. These restrictions will be different from those pertaining to forms that originated from sources other than verbs, and they will single out the relevant forms as a distinct grammatical class in the language. This, however, is due to the position of verbs in the clause, not any

generic category of tense, aspect, or modality that can be used to describe the semantics of the forms.

Such examples, which could easily be multiplied, do not exclude that particular grammatical phenomena may actually be based on generic categories. The point is however that the fact that forms within the same semantic domain have the same distributional properties is not per se evidence for the corresponding generic categories, because the properties may be independent of these categories. Whether and in what ways generic categories play a role in particular grammatical phenomena should rather be demonstrated on a case-by-case basis.

Boye's second argument for generic categories presents a similar problem. Boye argues that the fact that particular semantic maps (e.g. those for indefinite pronouns) encompass notions that can be described in terms of generic categories is evidence that these categories play a role in the grammar of the relevant languages. From this, Boye concludes that semantic maps can be used to test claims about generic categories, because the members of a generic category should always cover a continuous region on a semantic map.

Yet, the processes that give rise to the multifunctionality patterns described by semantic maps may be completely independent of any generic category that can be used to describe the relevant meanings. For instance, in several languages, the same forms are used to express a variety of root, deontic, and epistemic meanings, as described in the semantic maps for modality (Bybee, Perkins, and Pagliuca 1994, van der Auwera and Plungian 1998). This has been accounted for in terms of metonymization processes that take place at the contextual level and trigger the extension of individual forms from one meaning to another. For example, forms expressing deontic possibility are extended to the expression of deontic necessity because the latter meaning may be inferred from some highly particularized contexts where the forms are originally used. Likewise, expressions of deontic necessity develop meanings of epistemic necessity because these meanings may sometimes be inferred from contexts involving deontic necessity (Traugott and Dasher 2005: chap. 3). If this account is correct, the fact that the same forms express different modal meanings is unrelated to any generic category of modality, possibility or necessity, and cannot therefore be taken as evidence for such categories.

The fact that the multifunctionality patterns described by semantic maps may originate from processes of diachronic extension independent of generic categories also poses a problem for the idea that semantic map continuity should be a necessary criterion for generic categories. Semantic map continuity reflects the fact that the relevant meanings are encoded by the same forms. However, since this may be due to factors other than the status of these meanings with regard to a postulated generic category, semantic map continuity may actually have no theoretical relevance for that category, so there is no reason why it should be regarded as a necessary criterion for the category.

Also, even if a particular generic category is assumed to be part of the grammar of a language, this does not imply that individual forms will be extended from one meaning to another within the category. For instance, to take Boye's example, the fact that in some languages forms encoding various evidential meanings all share particular struc-

tural properties may in principle be taken as evidence that there is a category of evidentiality that plays a role in the grammar of the language, but this does not imply that individual forms will be extended from one evidential meaning to another. As a result, a generic category may not give rise to any multifunctionalty pattern, which means that the category will not correspond to any attested semantic map and the criterion of semantic map continuity will be impossible to apply.

Boye's proposal captures the fact that, in a number of languages, conceptually related notions may be encoded in the same way, either in the sense that are encoded by the same forms (as described by semantic maps) or in the sense that they are encoded by forms that share some distributional property. This pattern can be described in terms of particular categories (generic categories, that is), and from this Boye assumes that these categories play a direct role in the grammar of the relevant languages. This implies that they have some form of mental reality for the speakers of the language (though this point is not addressed in Boye's analysis). Yet, as the categories cannot actually be used to account for the pattern, there is no evidence that they are but a linguist's descriptive device.

Boye's proposal is representative of a widespread approach to grammatical categories, one in which two distinct levels of analysis, the description of empirically observed grammatical patterns and the (often implicit) formulation of hypotheses about the organization of a speaker's mental representation, are combined together. Grammatical categories are posited because they represent an effective way to describe some observed grammatical pattern, and from this linguists assume that they are part of a speaker's mental representation.

This may not be apparent in the functional-typological literature, where (in contrast to generatively oriented theories of grammar) categories are usually posited in order to describe some observed grammatical pattern, and no explicit assumption is usually made as to their status in terms of mental representation. Linguists working within the functional-typological approach, however, often ask questions such as whether or not some category should be assumed to have some particular property, whether or not some construction instantiates some particular category, or (as in Boye's case) what categories can actually be assumed to play a role in the grammatical organization of individual languages (see Haspelmath 2007 and Cristofaro 2009 for detailed discussion of this point). Such questions imply that grammatical categories are somehow assumed to exist independently of a linguist's description, that is, presumably, at some level of mental representation.

Likewise, there has been considerable debate within the typological community about the cross-linguistic and cross-constructional validity of grammatical categories. In particular, Dryer (1996, 1997) and Croft (2001) have argued that, contrary to what is standardly assumed in most of the literature on the topic, grammatical categories are language-specific and construction-specific, rather than cross-constructionally and cross-linguistically valid. This is because, since the categories that can be defined for different languages and constructions display different grammatical properties, these languages and constructions cannot be assumed to have the same categories.

In this case too, particular categories (language-specific and construction-specific categories, that is) are posited based on the grammatical patterns attested in the world's lan-

guages, and they are assumed to play a role in the grammar of individual languages, that is, to have some form of mental reality for the speakers of the language (see Dryer 1997: 134 for an explicit ackowledgement of this point).

Yet, the grammatical patterns attested in the world's languages provide evidence about the distribution of particular grammatical features, not evidence about a speaker's mental representation (Croft 1998, Haspelmath 2004, Cristofaro 2009). Individual grammatical patterns are in fact compatible with various types of mental representation. For example, the idea that grammatical categories are language-specific and construction-specific is crucially based on the fact that the categories that can be posited for different languages and constructions display nonoverlapping properties. Typically, however, these categories also display a number of overlapping properties (Dryer 1997, Croft 2001, among many others). If the nonoverlapping properties are included within a speaker's mental representation of the various categories, these will have different representations for different languages and constructions, i.e. they will be language-specific and construction-specific. In principle, though, it could also be the case that a speaker's mental representation of the various categories only includes the properties that these categories share across different languages and constructions, while the nonoverlapping properties are represented independently of the category as such (for example, at a separate level of clause structure, as is argued in Baker 2003). In this case, individual categories would have the same representation for different languages and constructions, i.e. they would be cross-linguistically and cross-constructionally valid (see Cristofaro 2009 and to appear for detailed discussion of this issue).

Also, individual grammatical patterns arguably originate from principles that are active at some level of mental representation, and lead speakers to create the constructions involved in the pattern. However, the grammatical patterns only provide evidence about the distribution of particular constructions, not about what principles gave rise to these constructions. For example, semantic maps show that the world's languages display recurrent multifunctionality patterns, but this provides no evidence about how these patterns originated, e.g. whether they originated from metaphorical associations between different meanings, or processes of metonymization in specific contexts. Likewise, a number of correlations exist between different word order patterns, but this does not tell us anything about what principles are responsible for the cooccurrence of the relevant patterns, and individual correlations are compatible with several principles. For example, the well-known correlation between the order of adposition and noun and the order of possessor and possessee has been argued to be due either to grammaticalization processes whereby possessive constructions are reanalyzed as adpositional constructions, or to a principle whereby speakers tend to maximize structures that are easy to process (see, most recently, Dryer 2006).

All this means that the way in which linguists describe observed grammatical patterns may not match a speaker's mental representation, both in the sense that the description may not correspond to any generalization that speakers make over the relevant constructions, and in the sense that it may not correspond to principles that lead speakers to create these constructions. It follows that, if linguists generalize over an observed grammati-

cal pattern by positing particular categories, whether or not these categories have mental reality cannot be decided based on the pattern as such. Rather, there should be psychological evidence that the categories correspond to generalizations that are actually made by speakers. In principle, this evidence could be of two types, either evidence that particular categories correspond to synchronic generalizations that speakers make over the grammatical patterns attested in the language, or evidence that these categories correspond to generalizations that lead speakers to create particular constructions. At the present state of our knowledge, these two types of evidence are both scarce, for very little is yet known about the synchronic organization of a speaker's mental representation, and the precise mental mechanisms that lead to the creation of novel constructions are still under dispute in many cases (see e.g. Bybee 1988 and Aristar 1991 on the development of word order patterns, or Heine, Claudi, and Hünnemeyer 1991: 65-78 on the role of metaphor vs. metonymization in grammaticalization phenomena). A central methodological question in addressing the issue of grammatical categories, and one that has been largely overlooked in the current practice, is however to properly identify what generalizations (descriptive generalizations as opposed to generalizations about a speaker's mental representation) can be made based on the available evidence. To this end, it is essential to distinguish between three levels of analysis: the description of observed grammatical patterns, the factors that may have shaped these patterns, and the ways in which these patterns may possibly be represented in a speaker's mind.

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