

“Irrealis” as a Grammatical Category

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Abstract. It is argued here that the term “irrealis” reflects a Jakobsonian view of grammatical categories as members of binary oppositions based on a single feature of meaning that is equally present in all contexts of use. This notion of irrealis does not therefore fit well with more current views of categories as tokens of use organized around a prototype with which they share some but not necessarily all features, nor with the view that grammatical markers develop diachronically from meaningful lexical items as used in specific constructions.

1. Grammatical meaning in American structuralism. While it sometimes seems that linguistic theory and linguistic description can exist and develop independently of one another, every description is based, at least implicitly, on a theory of language. This is just as true of descriptions of grammatical meaning as it is of descriptions of grammatical form. The influence of theory on the description of grammatical meaning may not seem so very obvious, however, because explicit attention to the nature and organization of grammatical meaning has hardly been the central focus of theoretical activity in this century. Although grammatical meaning has not attracted as much attention as syntactic theories, there have been major swings in the way it has been viewed, with consequent effects on the substance of grammatical description. What follows is a brief summary of the major changes in such theories in American linguistics.¹

The work of Franz Boas, Edward Sapir and Benjamin Lee Whorf on the grammatical systems of Native American languages in 1920s and 1930s show grammatical meaning being treated with great sensitivity and respect. The exciting discovery, emerging from the newly available data on a variety of native languages of North America, was that the concepts that require obligatory grammatical expression differ across languages, with some languages not using many of the traditional categories of European languages, such as obligatory number or gender, and instead requiring clauses to carry information about evidentiality or temporal distinctions much more elaborated than those familiar from European languages (Boas 1940:206–7). A tension between the emphasis on the similarities among languages and their differences is evident in the work of this period, with Whorf (1938) making his mark by arguing that the Hopi tense-aspect-modality system is vastly different from anything imaginable in European languages, while Sapir (1921) deftly juggles differences and similarities among languages in working out a typology of both morphological form and

grammatical meaning. Still, the differences among languages seemed profound, and it seemed natural that such differences would reflect equally profound differences in the ways that peoples of different cultures conceptualize reality.

This early start was not, however, followed by a great flowering of interest in grammatical meaning and its cultural and cognitive consequences. Instead, American linguists turned away from the study of meaning to concentrate on the study of form, led by Leonard Bloomfield (1933), who already in his book *Language* argued that, as scientific investigators, linguists have no direct access to meaning. The descriptive tradition that followed Bloomfield attended very little to the meaning of grammatical morphemes in the languages being described. A greater emphasis on the differences among languages arose. Beyond the categories of person and number, there seemed to be no hope that languages would carve up reality in similar ways, and a plethora of grammatical terminology arose for categories of tense, aspect, and mood, making such categories appear even more different crosslinguistically. The autonomy of grammar from meaning is asserted not only by Chomsky (1957), but also by Weinreich (1963), and finds expression in the descriptive tradition of tagmemics, in which morphemes are identified, not by meaning, but by their place in an elaborate numbering system that indexes their distribution (an example is Turner [1958]).

2. The influence of Jakobson. While American structuralism had taken a turn away from the consideration of grammatical meaning and any possible form-meaning covariation, Roman Jakobson, in an effort that spanned five decades, articulated a rigorous theory of grammatical meaning based on structuralist principles.² Although not many descriptions exist that adhere strictly to Jakobson's theory, some of his principles have become so basic to linguistic thought that they have been assumed uncritically in descriptions of both generative and more traditional leanings. The most important of these principles is that of the semantic opposition, which gives rise to designators of grammatical meaning, such as past-nonpast, future-nonfuture, and realis-irrealis.

The notion of opposition has several consequences for the analysis of grammatical meaning. First, Jakobson proposed that all grammatical oppositions were essentially binary and that categories having more than two members could be analyzed with sets of binary features. This proposal was based on a firm belief that binary opposition represents a logical operation very basic to human cognition and is furthermore essential to language in that it simplifies multi-lateral oppositions (Jakobson 1990c).

Second, it follows from the notion of opposition that a grammatical morpheme (henceforth, "gram") takes its meaning from the system of oppositions to which it belongs. Thus, a present tense in a language that also has a past and a future will be different from a present tense in a language that has a past but no future. In this view, grams do not have inherent meaning, but rather are defined by their relation to other members of the opposition.

Third, the categories of a Jakobsonian grammar are Aristotelean: the boundaries between members of the category are discrete and the features defining the members are necessary and sufficient conditions. Thus, the semantic space covered by a gram is homogeneous—each occurrence of the gram represents its features of meaning equally as well as any other occurrence.

Fourth, each gram has one abstract, invariant meaning—a meaning that is present in all contexts of use. Additional nuances or variations in meaning are attributable to items in the context and are not part of the meaning that is derived from the sets of binary features defining the meaning of a gram.

These principles have found their way into the set of assumptions that linguists use when approaching the analysis of the grammatical system of a language, and they show up to varying degrees in descriptive work. For instance, it is common to see labels such as "past-nonpast" and "future-nonfuture" used in grammatical descriptions, or even more explicitly binary features, "[+/- past]," "[+/- future]," "[+/- continuous]," etc. (e.g., Li 1973), in place of fuller descriptions of the range of use of grams.

The assumption that a gram has one abstract meaning that is manifest in all its occurrences is, of course, an assumption that is essential to linguistic analysis: one could not discern the meanings of morphemes, either lexical or grammatical, without assuming that they are constant across conditions. Only in this way can one discover the cases in which meanings are not constant. It is the treatment of meanings that do differ in context, e.g., the use of the English past tense in *if*-clauses yielding a hypothetical, but not past, sense, that is controversial. A Jakobsonian analysis would insist that English past tense cannot mean 'past' but rather must mean 'remote from present reality', since it is used in situations such as hypothetical ones, which are not past (Steele 1975; Langacker 1978).

On the other hand, two other tenets of Jakobson's theory are not generally applied descriptively. First, Jakobson considered grammatical meaning to apply only to obligatory categories (Jakobson 1990c), thus excluding from his theory of grammar nonobligatory items such as auxiliary constructions, particles, and derivational affixes. This exclusion leaves only a small core of grammatical categories to be analyzed and, indeed, in some languages, none at all. Most descriptions, to be complete, must also attend to the nonobligatory but still grammaticized items and constructions. In fact, many descriptions omit a discussion of obligatoriness altogether, perhaps because it is very difficult in many cases to decide whether or not a category is obligatory.³

Another aspect of Jakobson's theory, which he regarded as of utmost importance, but which has not been strictly adhered to in analyses, is the asymmetry between the members of a binary set. When two categories are in opposition, one may signal the existence of a feature of meaning, but the other does not signal the absence of that feature—it simply does not say whether the feature is present or not. Thus, for Jakobson, the negative value for a feature is always the

unmarked value. While the notion of markedness has pervaded all branches of linguistics, it has also generalized far beyond the strict definition assigned to it by Jakobson. For most linguists today, the unmarked member of a category, or the unmarked construction type or interpretation, is the one judged to be most common and most usual, either in the language or crosslinguistically.

3. Beyond structuralism. Three developments in the 1970s and 1980s have cast doubt upon the validity of the general structure of the theory Jakobson proposed: (1) the discovery of close crosslinguistic similarity among grammatical categories, particularly of tense and aspect (Comrie 1976, 1985; Dahl 1985; Bybee 1985); (2) the development of alternate theories of human categorization based on psychological testing (variously termed as “fuzzy sets,” “prototype theory,” or “family resemblance categorization”); and (3) the development of the theory of grammaticization, which traces grammatical meaning back to its lexical roots.

The idea that grammatical meaning derives from the way members of categories oppose one another in a particular language leads to an emphasis on language-specific descriptions and does not necessarily suggest that there might be crosslinguistic similarities in grammatical categories. Even if the same set of features is available to all languages, when references to present time are described as part of the nonpast in one language and as part of the nonfuture in another, no basis for understanding similarity or overlap in function will be apparent. Thus, crosslinguistic studies of grammatical categories are rare in the 1940s, 1950s, and 1960s. This began to change in the mid-1970s. Comrie's (1976) book on aspect treated the content of commonly occurring aspectual categories, such as perfective, imperfective, progressive, and perfect, using examples from a variety of languages. The implicit assumption in this work is that grams not only have inherent content, but that this content is comparable across languages. Subsequent work on tense and aspect recognizes that these categories also have important discourse functions (Hopper 1982). Two more ambitious and systematic crosslinguistic studies of tense and aspect, Bybee (1985), a reference-grammar survey of fifty languages, and Dahl (1985), a questionnaire survey of sixty-four languages, conclude that the most common categories occurring crosslinguistically—perfective, past, imperfective, present, progressive, perfect, and future—have very similar meanings and distributional ranges in the languages in which they occur.

Preceding these developments by a few years, new views of the way human beings categorize aspects of their experience were put forward in psychology. In a series of experiments, Rosch (1973) showed that the ordinary cultural and natural objects in our experience are categorized on the basis of the number and type of characteristics that they share with a central or focal member of the category. An important result of this work is the conclusion that not all members of a category are on the same footing—some fit the category more squarely while

others may be more marginal. The boundaries between categories, then, are not necessarily discrete.

As applied to grammatical categories, this view implies that not all senses or uses of a grammatical morpheme (gram) have to be equally good exemplars of the category—some may be central and some marginal. Not all features that characterize the meaning of a gram have to be present in all of its uses. This theory contrasts sharply with the Jakobsonian theory, described in section 2, in which all instances of a gram must share at least one invariant feature.

Dahl (1985) explicitly adopts prototype categorization as the theory behind his empirical study. He finds that not only are language-specific categories organized in terms of more central and more marginal examples, but also that, crosslinguistically, it is possible to define the center or core of a crosslinguistic category and measure the degree to which language-specific categories fit the crosslinguistic prototype. In Dahl's theory, then, the primitives are not binary features that label the oppositions into which grams fit, but rather prototypes defined by semantic properties whose absence is not necessarily implied in other categories. He likens these prototypes to focal points in the semantic domain of temporality, similar to the focal points identifiable in the color spectrum.

A third major development in the study of grammatical meaning is the emergence of a theory of grammaticization—the process by which grammatical meaning is created and changes over time. In the 1980s, book-length studies of the patterns of grammaticization began to appear (Lehmann 1982; Heine and Reh 1984; Bybee 1985). These and subsequent studies make it clear that the primary diachronic source of grammatical morphemes (grams) is lexical morphemes in frequently used constructions. The findings in grammaticization research have several consequences for a theory of grammatical meaning. First, in most cases it is the semantic content of lexical items that is molded into grammatical meaning. Thus, grammatical meaning is not derived solely from contrast with other items in the system; rather, it is, at least in part, meaning retained from the original lexical meaning of the source items. Second, the same lexical sources give rise to the same grammatical categories in unrelated languages. For instance, verbal constructions meaning ‘want to’ and ‘be going to’ give rise to future markers; stative auxiliaries such as ‘have’ and ‘be’ with past participles give rise first to resultative, then anterior (a past action with present relevance) meaning, and finally to past tense or perfective aspect (as in French, Italian, German, and Dutch) (Bybee, Perkins, and Pagliuca 1994). The similarity in the paths of development strongly suggests that the meanings of grams at the various stages of development are also similar. Third, diachronic studies show that grams take on new meanings in a variety of ways: they may show metaphorical extensions (Heine, Claudi, and Hünemeyer 1991); they may take on new meanings by pragmatic inference (Traugott 1989); they may simply generalize to use in more and more contexts, with consequent semantic generalization; or they may absorb meaning from the context (Bybee, Perkins, and

Pagliuca 1994). Having taken on a new use or sense, however, they do not always immediately lose older senses, with the result that grams become polysemous. Grammaticization studies, then, help to clarify the relation among the different senses or uses of a single gram, though they by no means solve the problems of how speakers handle synchronic polysemy.

4. Applications to modality. When investigating the meaning or function of grammatical morphemes, especially crosslinguistically, it is important to distinguish the relevant conceptual domain from the grammatical expression of concepts within that domain. For instance, time is a conceptual domain that is presumably universally relevant, and languages refer to temporal concepts both lexically (*today, last year, soon*) and grammatically. Tense and aspect are the labels for the grammatical expression of temporal concepts. Compared to lexical expression, the grammatical expression of temporal concepts is extremely limited—only certain focal concepts in the temporal domain receive grammatical expression. These crosslinguistically common focal points for grammatical expression are called “gram-types” in Bybee and Dahl (1989); gram-types are manifest in language-specific grams.

Applying this three-way distinction of the conceptual domain, gram-types, and grams to modality, modality is a broad functional or conceptual domain, and certain focal points in this domain commonly take grammatical expression in language-specific grams. However, the actual application of this model is not so clear in the case of modality as it is in the case of tense and aspect. A major difficulty is encountered in giving a coherent characterization to the conceptual domain of modality. In fact, it appears that modality encompasses several partially parallel conceptual domains whose main connections may be more diachronic than synchronic (Bybee 1985). One way of characterizing these domains (from Bybee 1985; Bybee, Perkins, and Pagliuca 1994) is as follows:

1. The domain of conditions on agents: *agent-oriented modality* specifies conditions on agents with respect to the completion of the predicate. Traditionally, these conditions have been the social conditions of obligation and permission, but linguistically parallel markers often also specify the internal conditions of volition and ability. In this domain, linguistic expression is commonly lexical or through auxiliaries or particles and very rarely through inflection.
2. The functional domain of speech acts that impose obligation or grant permission: *speaker-oriented modality*, of which the imperative is the most commonly occurring example, signals that an utterance is a directive or mand. Grams with this function are commonly inflectional (expressed in the bound, obligatory morphology) and appropriately designated as *mood*.

3. The epistemic domain: *epistemic modality* expresses the degree of commitment the speaker has to the truth of the proposition expressed in the utterance. The degree of commitment ranges from uncertainty through possibility to probability. Epistemic modality is often expressed inflectionally, but may also be periphrastic or lexical.
4. The domain of subordinate propositions: *subordinating moods* are usually related synchronically or diachronically to the first three domains. They either signal an embedded directive or a clause that is not asserted, particularly one whose truth the speaker may not be committed to.

Thus modality, rather than encompassing one conceptual domain, as tense and aspect or person and number do, may span these four domains. A single gram may be ambiguous between readings on two or more of these levels—e.g., British English *should*, which is used for obligation, epistemic probability (*the trip should take about fourteen days*), the imperative (*you should repeat this ten times*), and as a subjunctive (*it is funny she should say that*) (Coates 1983). Such ambiguity results from the gram proceeding through the four levels in a diachronic sense: agent-oriented modalities tend to generalize themselves, but they also tend to give rise to meanings belonging to the other three types.

Despite the complexity of the domain, universal gram-types are identifiable in modality, just as they are in tense and aspect. Certain focal meanings occur frequently across languages. For instance, Bybee, Perkins, and Pagliuca (1994) find grams expressing obligation, permission, ability, root possibility, epistemic probability, epistemic possibility, imperative, and prohibitive to be quite common and quite similar in a seventy-six-language sample. Moreover, the polysemy of grams in this crosslinguistic sample follows patterns that strongly suggest universal diachronic pathways by which obligation evolves into probability in the epistemic domain and into imperative in the speaker-oriented domain; ability gives rise to root possibility and permission and further to epistemic possibility. Thus, there is no shortage of diachronic or universal regularities in the modality domains.

In addition, however, there is no shortage of puzzles to be untangled, especially in language-specific synchronic analyses. One ubiquitous problem arises from the fact that a highly generalized modality gram may have, especially by the late stages of grammaticization, spread to multiple constructions, thereby exhibiting a distribution and polysemy that does not yield easily to a unitary analysis. Further, since the innovation of grammaticization tends to take place in main clauses, and subordinate clauses tend to be conservative morpho-syntactically, very old, highly generalized grams tend to remain conventionalized in subordinate clauses, where it is difficult to identify their semantic contribution. In order to unravel this problem, it is necessary to examine the role of constructions in the process of grammaticization.

Early in the recent revival of grammaticization studies, it was often said

that, in grammaticization, a lexical morpheme becomes a grammatical one (Lehmann 1982). Lately, however, the grammaticization literature contains many corrections of this overly simple statement. A lexical morpheme does not grammaticize; rather, a lexical morpheme (or a combination of grammatical ones) *in a construction* grammaticizes (Bybee, Perkins, and Pagliuca 1994). In fact, it is the whole construction, with specific morphemes plugged into it, that produces a gram. Thus, we would not want to say that *have* has grammaticized in English to both a perfect and an obligation gram. Rather, we would say that the construction [*have* + past participle] has become an anterior, but the construction [*have* + *to* + verb] has become an obligation expression. Similarly, it is not accurate to say that in English *go* has become a future marker; rather we must say that [*be going to* + verb] has become a future marker.

There are two reasons that it is important to consider the construction that is grammaticizing. One is a diachronic reason: the whole construction contributes to the resulting grammatical meaning. Thus, in studying the relation between the source meaning and the resulting meaning, the whole construction has to be taken into account (Bybee, Perkins, and Pagliuca 1994). The second is a synchronic reason: because any particular morpheme contributes only a part of the meaning of a grammaticized construction, one need not necessarily expect to find that elements from the same etymon in different constructions have identical or even relatable meanings. Thus, one would not attempt to identify a single meaning for the two occurrences of *have* in the perfect and obligation constructions. Yet, it is precisely attempts of this nature that stymie analysts, particularly of lesser-known languages, leading to the notion that grams in different languages have very different functions, and thus to the development of vague terminology to cover vast territories of semantic space. In section 5, which discusses the use of the term "irrealis," I will argue that, among other difficulties with this term, it is sometimes used to cover etymologically related elements in very different constructions that are perhaps not synchronically related.

5. Is there a universal grammatical category "irrealis"? In Bybee, Perkins, and Pagliuca (1994: chap. 6), we noted that, in our large-scale cross-linguistic survey of categories of the verb, we did not find evidence for a universal gram-type of irrealis that is in any way comparable to other identifiable gram-types, such as perfective, future, progressive, obligation, etc. This does not mean that there is no dimension of conceptual space that includes imagined, projected, or otherwise unreal situations, nor does it mean that the concept or the label "irrealis" might not sometimes be descriptively useful; it simply means that there is no widespread crosslinguistic evidence that such a semantic space has a single grammatical marker.

Instead, the crosslinguistic survey found precisely what the papers in this issue report: For any given language, there are several grams that mark off

portions of the conceptual space for situations that are not asserted to exist, or if there is a highly generalized gram, it does not cover all "irrealis" situations and furthermore does not actually have one invariant meaning, but rather takes its meaning from the construction in which it occurs. Let us consider some examples of each situation.

First, consider Callaghan's description of Lake Miwok appearing in this issue. Here, we find one typical situation: Lake Miwok has different grams for various meanings that might be considered in the domain of the unreal. It has a future, two negatives, a verbal suffix *-welak* used for desire, intention, and sometimes future or imperative, a purpose clause marker, and particles for the protasis and apodosis of counterfactual conditionals. All of these grams fit squarely the universal gram-types identified in Bybee, Perkins, and Pagliuca (1994) and elsewhere. It is quite common for a future to derive from a verb meaning 'want', as *-welak* seems to, and, further, such a gram would often be used for volition, intention, and imperative, as well as for future. The particle for the result clause of the conditional signals obligation in main clauses—another common pairing of uses for the same gram. Note, however, that there is no one marker for the irrealis domain.

Similarly, Martin's description of Mocho (also in this issue) emphasizes that the expression of irrealis is distributed over various parts of the grammatical system, and not restricted to verbal marking. Also nonverbal in origin are the distal markers in Toba and Pilagá that, by signaling that the referent is at a distance or not visible, also imply that the associated situation is not yet realized or known (Vidal and Klein, in this issue).

Kinkade's analysis of Upper Chehalis (this issue) also makes it clear that one must distinguish the conceptual notion of unreality from the grammatical one. He reports that subordinate markers do not distinguish real from unreal situations, but that there are several particles that indicate future and two other particles that seem difficult to analyze. Here, Kinkade opts for the terms "realis" and "irrealis" to characterize these two modals, even though they cover only a small and very restricted portion of these concepts. An analysis using finer-grained modal distinctions would be more useful, as the broad concepts do not characterize the meanings of the particles explicitly and furthermore suggest an inappropriate comparison across languages. Kinkade describes the two particles in question as very similar in meaning and translates both (at least at times) as 'can'. A Jakobsonian theory of oppositions leads us to expect contrasting grams to be maximally different in meaning (as the oppositional terms "realis" and "irrealis" suggest). However, it is common to find layers of grams (Hopper 1991) with similar meaning, but only at different stages of grammaticization. For instance, in English, *can* and *may* express an overlapping range of meaning: *can* expresses root possibility (including permission) and *may* (the more grammaticized one) expresses root possibility (including permission) in older or more formal or written language, but most frequently expresses

epistemic possibility (Coates 1983). These two grams are in the same formal category (as modal auxiliaries), and yet they do not make a maximal contrast. The Upper Chehalis data suggest a similar situation: the particle *q'i* expresses root possibility in the examples given, while the other particle *q'at* has this use in addition to a more hypothetical or epistemic sense, which in terms of grammaticization would be an additional development from the root sense. It seems to me that the use of broad terms such as "irrealis" unfortunately distracts the analyst from a more in-depth semantic analysis and furthermore suggests that these two morphemes contrast in meaning in all cases, even though Kinkade has stated that in some contexts they are very similar in meaning.

Other situations in which the term "irrealis" seems to turn up in language descriptions are cases in which the same element occurs in a variety of constructions, some of which are modal in nature. The analyst in some cases wishes to assign a single invariant meaning to the element although it occurs in different constructions. This single invariant meaning must be highly abstract to cover so many cases; thus a term such as "irrealis" is invoked. Consider, for example, Chafe's (1995) analysis of Caddo, in which two sets of personal prefixes for verbs are labeled "Realis" and "Irrealis." When used alone, the Irrealis Prefixes signal a *yes-no* question; in all their other uses, other morphemes are present to supply the specific meaning. These constructions express negation, prohibition, obligation, conditional (three types), simulative ('as if'), infrequency, and surprise. Just as there is no particular reason to search for one meaning for English *have* in the different constructions in which it occurs, I see no reason to believe that the personal prefixes express a coherent meaning such as "irrealis." "Irrealis" as a meaning for these prefixes is also not fully appropriate since some irrealis clauses, such as imperatives and futures, contain the so-called Realis Prefixes.

The Caddo example is typical of a range of cases in which there are two (sometimes more) types of verbal forms distributed across different constructions such that one of them has a cluster of modal functions (cf. Maung [Capell and Hinch 1970], or Baram [Roberts 1990]). However, it is also typical in the sense that the distinction in question does not correspond exactly to the distinction between real and unreal situations. In Maung, for example, the negative imperative and the future belong to the Realis, and in Bargam, the past habitual belongs to the Irrealis. In the sample of seventy-six languages examined in Bybee, Perkins, and Pagliuca (1994), and in all the other cases that have come to my attention, including those in this issue, there is not one case in which a grammatical distinction corresponds directly to the notional distinction between real and unreal situations.

Compare this situation to other general grammaticized distinctions, such as the perfective-imperfective distinction. Crosslinguistic studies such as Comrie (1976) and Dahl (1985) have revealed a close correspondence among the meanings of grams expressing perfective and imperfective across languages. Admittedly, one must view the crosslinguistic gram-type as prototypical in structure,

but there is a core of prototypical perfective functions and a core of prototypical imperfective ones (Dahl 1985). For instance, for the perfective, the core function most commonly found across languages is that of narrating a sequence of events. In terms of semantic attributes, Dahl gives the following:

A PFV (perfective) verb will typically denote a single event, seen as an unanalysed whole, with a well-defined result or end-state, located in the past. More often than not, the event will be punctual, or at least, it will be seen as a single transition from one state to its opposite, the duration of which can be disregarded. [Dahl 1985:78]

So far, no proposal has been made in the literature for a specific characterization of the prototypical uses and common semantic attributes of either "realis" or "irrealis." Indeed, it appears unlikely that any such proposal could be forthcoming, given the disparate uses to which grams labeled "irrealis" are put. Nor are there any proposals concerning the basic or core uses of irrealis. It appears, then, that "irrealis" should not be treated as the same type of grammatical category as perfective, i.e., it is not a universal gram-type.

Given, then, this lack of strict correspondence between the notional domain and grammatical expression, what can we make of the irrealis notion? Clearly, there is a conceptual domain that contains many ways in which a situation can be conceived of as unreal. In fact, it is largely coextensive with the domains of modality as outlined above. But perhaps lack of reality is not the most important feature of these domains; perhaps from the point of view of what people want to communicate, the more specific meanings such as obligation, permission, imperative, and possibility are more useful. A highly generalized notion such as 'lacking in reality' is probably too abstract to be of much communicative use. The fact that the most generalized markers, such as Chafe's (1995) Irrealis Prefixes, occur in the context of more specific markers suggests that this is the case.

6. Other issues concerning "irrealis." A further observation about the term "irrealis" and the uses to which it is put is that it may well focus on the wrong issue within the domain of modality, since it seems to point to whether or not events or situations are 'real'. For example, Chafe writes:

The realis-irrealis dimension has a consistent functional basis in people's judgments concerning the degree to which their ideas accord with what they believe to be objective reality. [Chafe 1995:364]

Presumably, Chafe here means that the ideas that people are expressing in their utterances are compared with "objective reality" and found to be either real or unreal. However, there is evidence that modal categories perform a more discourse-oriented function: these grams do not express functions along a dimension of perceived reality, but rather their meanings concern whether or

not, or the degree to which, a speaker is *asserting* the truth of the propositions contained in the utterance (Hooper 1975; Bybee, Perkins, and Pagliuca 1994).

On this view, it is easier to define "realis" than its opposite pole: statements are "realis" if they are asserted by the speaker. Other moods are used for other discourse or illocutionary functions: imperatives and prohibitives do not assert, they direct; epistemic moods mollify the strength of a statement so that it is not a bald assertion; subordinating moods signal that the clause is backgrounded and not asserted and occur even in cases where the proposition behind the clause is presupposed to be true—e.g., in the Spanish subjunctive *Lo siento que esté (SUBJ) enferma* 'I'm sorry that she's sick', or in British English *It's surprising that she should be so late*. These examples make it clear that it is not perceived reality or unreality that is at issue, but rather how the speaker is positioning the proposition in the discourse.

Hofling (this issue) emphasizes the discourse function of clauses marked with the Dependent Status marking in Itzaj Maya. Such clauses have independent person-number marking and indicate less discourse cohesion than other types of subordinate clauses, yet they do not constitute the main, foregrounded clause and are so marked. While Hofling claims that Dependent marking is prototypically irrealis, it is important to note that some examples contain clauses that designate situations that did in fact occur and are presupposed to be true in the context, and yet have Dependent marking. Such a case occurs in the 'time since' constructions, where one example is translated "It's already three months since you went (DEP) to shoot and you haven't come (DEP) back until now we are seeing your face" (Hofling, this volume, example (25)). In this case, as in the cases cited in the preceding paragraph, it is more appropriate to say that the clause with Dependent marking is not asserted, rather than saying that it is unreal.

A second issue of some importance to the analysis of the meaning of modal categories is brought up by Bendix (this issue) and Vidal and Klein (this issue), who argue that particular meanings of constructions in context may arise by inference. Bendix illustrates that for certain Newari suffixes of modality (in particular epistemicity and evidentiality) strikingly different readings of these grams arise when they are combined with other elements, such as the first person singular pronoun. He argues that the resulting interpretation is not derivable from a strict combination of the meanings of the elements, but rather is the result of an inferential process, which, in a sense, adds new meaning in particular contexts. Similarly, Vidal and Klein (this issue) show that the use of distal markers with nouns in Pilagá and Toba has the effect of casting the whole clause into a projected or hypothetical time, again through the process of inference.

The existence of inferential or pragmatic meaning makes the search for an invariant meaning for each gram more difficult, but the consequences of inference for the analysis of meaning do not stop there. Traugott (1989) and Traugott

and König (1991) have shown that, over time, meanings that were originally only inferences have become conventionalized as part of the meaning of a gram. Since inferences allow the hearer to add in meaning whose source is general world knowledge applicable in a particular context, such meaning changes create polysemy and, in fact, make it impossible to find a single invariant meaning for each gram.

7. Conclusion. Given these considerations, I conclude that instances where the label "irrealis" has been used to characterize the meaning of a grammatical morpheme fall into one of two categories: either they are cases in which a more specific characterization would be more useful, or they are cases in which the analyst has tried to come up with a single meaning for an element that is common to many different constructions, where, in fact, it is the construction as a whole that is supplying the (usually more specific) sense. In other words, it appears that the term "irrealis" is simply too general to be useful, except as a pointer to a very broad domain.

The underlying theoretical question that ultimately must be addressed, then, is the extent to which users of language form abstract generalizations concerning the meanings and functions of grammatical forms and constructions. It was once believed that maximal generality of description was necessary because it allowed for the productive use of language. How could speakers extend constructions to new situations if they were not of a very abstract and general nature? It is now known that extension to new situations can be accomplished by a variety of mechanisms, including the use of metaphor and metonymy and the exploitation of commonly occurring inferences. It is possible that new occurrences arise on the basis of very local analogical processes rather than by the use of very abstract and general schemas.

Langacker (1987:409–47) argues that the representation of grammatical schemata links specific constructions with specific and concrete contexts of use. The representation is very local and highly redundant, but local schemas may be organized into increasingly abstract and general schemas at higher levels. However, at higher levels of abstraction, it is increasingly difficult to find evidence for generalizations. We simply do not know whether language users form abstractions across many uses of highly grammaticized forms, or whether they manipulate more specific constructions with more concrete meanings and contexts of use. As the papers in this issue demonstrate, for some very difficult areas of modality, the evidence favors the latter conclusion.

Notes

1. So brief a survey may come dangerously close to caricaturing the positions described. In spite of this danger, I think it is worthwhile to try to see the broad outlines of the traditions for treating grammatical meaning that have developed in American linguistics.

2. This discussion is based on Jakobson (1990a, 1990b, 1990c) and on editorial notes

by Linda Waugh and Monique Monville-Burston (Waugh and Monville-Burston 1990: 324-31, 332-85).

3. For instance, it is difficult to decide whether or not the category of modal auxiliary is obligatory in English. The test would be whether or not the absence of a member of the category is meaningful. One could argue that the absence of a modal signals an unqualified assertion on the part of the speaker.

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