

Abbreviations

Srel	relative clause
SUB	subordinator
SUBJ	subject
SUBJUNCT	subjunctive
SW	switch-reference marker
TNS	tense
TOP	topic
TRANS	transitive
V	verb
VO	verb-object word order
VP	verb phrase
1	first person
2	second person
3	third person

Symbols

>	becomes/is replaced by/splits into
<	derives from
-	morpheme boundary
:	portmanteau morpheme boundary
~	alternates with

Stages of English

OE	Old English (c. 600–1125)
ME	Middle English (c. 1125–1500)
EMdE	Early Modern English (c. 1500–1750)
MdE	Modern English (c. 1750–1950)
PDE	Present-Day English (c. 1950–)

By convention, vowel length signs have been omitted in Latin and Old English forms.

1

Some preliminaries

1.1 Introduction

- (1) Bill is going to go to college after all.

What is the relationship between the two instances of *go* in this sentence? The first *go* is usually analyzed as an auxiliary, the second as a main verb. Are they different morphemes that just happen to look and sound alike, that is, are they homonyms? Are they variants of the same morpheme in different contexts, that is, are they polysemous? Is the auxiliary historically derived from the main verb, and, if so, is this kind of derivation cross-linguistically attested?

What permits the pair in (2) but not the (b) sentence in (3)?

- (2) a. Bill is going to go to college after all.
 b. Bill's gonna go to college after all.
- (3) a. Bill's going to college after all.
 b. *Bill's gonna college after all.

These questions and many others are characteristic of the study of grammaticalization. As a first approximation, the answer is that the auxiliary which expresses immediate futurity derives historically from the motion verb *go* in a highly specific context, and that the two coexistent forms used to be polysemous. Such meaning-form correlations are found in a wide number of languages around the world.

The term "grammaticalization" has two meanings, one to do with a research framework within which to account for language phenomena, the other with the phenomena themselves. In this respect the term "grammaticalization" resembles not only other terms in linguistics such as "grammar," "syntax," and "phonology," but the terminology of all higher-level concepts in scholarly disciplines. As a term referring to a research framework, "grammaticalization" refers to that part of the study of language change that is concerned with such questions as how lexical items and constructions come in certain linguistic contexts to serve grammatical functions or how grammatical items develop new grammatical functions. This research framework is also concerned with characterizing the subset of cross-linguistically

recurring correlations across time among semantic–pragmatic, morphosyntactic, and (sometimes) phonological changes. It highlights the tension between the fixed and the less fixed in language, between relatively unconstrained lexical (semantic) structure and more constrained syntactic, morphosyntactic, and morphological structure. It provides the conceptual context for a principled account of the relative indeterminacy in language and of the basic non-discreteness of categories. As a term referring to actual phenomena of language, “grammaticalization” refers most especially to the steps whereby particular items become more grammatical through time. Grammaticalization in this sense is part of the wider linguistic phenomenon of structuration, through which combinations of forms may in time come to be fixed in certain functions.

Since Saussure, many linguists have approached language from one of two perspectives: that of its structure at a single point in time (“synchronic”) and that of change between two or more points in time (historical or “diachronic”). The synchronic dimension of a language is said to be its system of grammatical units, rules, and lexical items (together with their meanings), that is, its grammar. It is usually conceived as essentially stable and homogeneous. The diachronic dimension, on the other hand, is understood as the set of changes linking a synchronic state of a language to successive states of the same language. The discreteness of categories and rules, and the rigidity of the distinction between the synchronic and diachronic dimensions have been called into question by work on the structured variation to be found in various social contexts, and analysis of discourse and language in use. They are also called into question by the study of grammaticalization.

Grammaticalization likewise has been studied from these two perspectives. The chief perspective is historical, investigating the sources of grammatical forms and the typical steps of change they undergo. From this perspective, grammaticalization is usually thought of as that subset of linguistic changes whereby a lexical item or construction in certain uses takes on grammatical characteristics, or through which a grammatical item becomes more grammatical. The other perspective is more synchronic, seeing grammaticalization as primarily a syntactic, discourse pragmatic phenomenon, to be studied from the point of view of fluid patterns of language use. In this book we will combine these two points of view, but with greater emphasis on the historical dimension.

Our example of *be going to/be gonna* illustrates several factors typical of grammaticalization viewed from the historical perspective:

(a) The change occurs only in a very local context, that of purposive directional constructions with non-finite complements, such as *I am going to marry Bill* (i.e., *I am leaving/traveling in order to marry Bill*). It does not occur in the context of

directionals in which the locative adverb is present, such as *I am going to London* or even *I am going to London to marry Bill*.

(b) The change is made possible by the fact that there is an inference of futurity from purposives: if I am traveling in order to marry, the marriage will be in the future. In the absence of an overt directional phrase, futurity can become salient.

(c) The shift from purposive *be going (to...)* to auxiliary *be going to* involves reanalysis not only of the *be going to* phrase but of the verb following it. Thus [I am going [to marry Bill]] is rebracketed as [I [am going to] marry Bill]. It also involves a change from progressive aspect to “immediate future.”¹

(d) The reanalysis is discoverable, that is, is manifest, only when the verb following *be going to* is incompatible with a purposive meaning, or at least unlikely in that context, for example, *I am going to like Bill*, *I am going to go to London*. In other words, the reanalysis is discoverable only because the contexts in which *be going to* can occur have been generalized, or analogised, to contexts that were unavailable before.

(e) Once the reanalysis has occurred, *be going to* can undergo changes typical of auxiliaries, such as phonological reduction. The reduction of the three morphemes *go-ing to* into one (*gonna*) is possible only because there is no longer a phrasal boundary between *-ing* and *to*.

(f) The various stages of grammaticalization of *be going (to...)* coexist in Modern English, although the change originates in the fifteenth century or perhaps even earlier.

(g) The original purposive meaning continues to constrain the use of the auxiliary: *be gonna* is the future of intention, plan, or schedule. As an original aspectual, it can occur in constructions where a future formed with *will* cannot:

- (4) a. If interest rates are going to climb, we'll have to change our plans.
b. *If interest rates will climb, we'll have to change our plans.

This property of persistence of meaning presumably derives in part from the fact that the older *be going (to...)* for a long time was polysemous with and coexisted with the newer use, and hence allowed reinforcement of older meanings.

(h) The main verb *go* is relatively general in meaning, that is, it expresses any kind of motion away from the speaker, including walking, meandering, running, riding, etc.

(i) As grammaticalization has taken place, some of the original relatively concrete meaning of *go* has been lost, specifically motion and directionality. However, some new meanings have also been added; these are more abstract and speaker-based meanings, specifically temporal meanings based in speaker time. The historical development of the construction will be discussed more fully in Chapter 4.

1.2 What is a grammaticalized form?

As is usually the case with words rich in implications, there are a number of different conceptions of grammaticalization. Yet there are central, prototypical instances of grammaticalization which most linguists would recognise, and we start with some of them.

For example, it is usually accepted that some kind of distinction can be made in all languages between “content” words (also called “lexical items,” or “contentives”), and “function” words (also called “grammatical” words). The words *example*, *accept*, and *green* (i.e., nouns, verbs, and adjectives) are examples of lexical items. Such words are used to report or describe things, actions, and qualities. The words *of*, *and*, *or*, *it*, *this*, that is, prepositions, connectives, pronouns, and demonstratives, are function words. They serve to indicate relationships of nominals to each other (prepositions), to link parts of a discourse (connectives), to indicate whether entities and participants in a discourse are already identified or not (pronouns and articles), and to show whether they are close to the speaker or hearer (demonstratives). Frequently it can be shown that function words have their origins in content words. When a content word assumes the grammatical characteristics of a function word, the form is said to be “grammaticalized.” Quite often what is grammaticalized is not a single content word but an entire construction that includes that word, as for example Old English *þa hwile þe* ‘that time that’ > *hwile* ‘while’ (a temporal connective).

1.2.1 A preliminary classification of grammatical forms

Not all grammatical forms are independent words. In most languages, at least some grammatical forms are bound as an affix or other category. Although there is no full agreement on definitions of grammatical forms, in general it is possible to speak of a continuum of *bonding* between forms that has a looser relationship between forms (i.e., independent words) at one end and a tighter relationship (i.e., grammatical affixes attached to stems) at the other. On this continuum there are various “cluster” or “focal areas” of the following nature (cf. Halliday 1961: 249; Bybee 1985; Hammond and Noonan 1988):

(a) Grammatical words with relative phonological and syntactic independence. For example, English prepositions can be found at the end of a clause without a noun phrase, as in *This is where we’re at* and *This bed has been slept in*. In this position they have full segmental structure (unreduced vowels and consonants, e.g., [æt], not [ət]) and full prosodic structure (they can take stress).

(b) Derivational forms. Content words themselves often contain meaningful parts, known as derivational forms, that are neither inflections nor clitics

(see below). Many derivational forms add a meaning component without affecting the category in question. The *un-* of *unhappy* adds to the adjective *happy* the meaning ‘not,’ but does not change the adjectival status of the word. Similarly the *-ling* of *duckling* adds to the noun *duck* the new meaning ‘young and small,’ but does not change the nominal status of the word. Such derivational morphemes are part of the lexicon and can be called “lexical derivational morphemes.” Other derivational forms do change the category of the word. For example, in the word *happily*, the suffix *-ly* derives an adverb from an adjective; in *swimmer*, the suffix *-er* derives a noun from the verb *swim*. Likewise, in the word *reclusive*, the suffix *-ive* derives an adjective from a noun. Because they not only add meaning but also serve to indicate grammatical categories, such “grammatical derivational morphemes” can be considered to serve a role between content and grammatical forms. Derivational morphemes are added to roots or stems, and the derived stems may be hosts for clitics and inflections.

(c) Clitics. These are forms that are not affixes, but are constrained to occurring next to an autonomous word, known as the host (for important treatments, see Klavans 1985; Zwicky 1985a; Halpern 1995). The diachronic process whereby a lexical form becomes a clitic is called “cliticization” (the corresponding verb is “cliticize”). The word clitic is a cover term for two varieties. A clitic that precedes the host is called a “proclitic,” e.g., in colloquial English, ‘s in ‘s me ‘it’s me.’ A clitic that follows its host is an “enclitic.” Good examples of clitics in English are the ‘m in *I’m*, the ‘re in *you’re*, the auxiliaries ‘ll, ‘ve in *we’ll*, *we’ve*, etc.; and discourse particles in many languages, e.g., in Latin, *-que* ‘and’:

- (5) Conticuere omnes, intentique ora tenebant.
 fell-silent all, intent-*que* gazes they-held
 ‘All fell silent and intently held their gaze.’ (c. 30–19 BC, Virgil, *Aeneid* II, 1)²

Clitics may be thought of as forms that are half-way between autonomous words and affixes (Jeffers and Zwicky 1980). They may share properties of both, although it is hard to make generalizations about which features will occur in a given instance. For example, clitics may resemble affixes in forming an accentual unit with the host. In Indonesian, where stress tends to occur on the next-to-last syllable of the word, the enclitic pronoun *nya* ‘its’ in *warná-nya* ‘its colour’ affects the stress in the host stem (contrast *wárna* ‘colour’). On the other hand, clitics may behave more like independent words in having no effect on accent, as in Spanish *háblame* ‘speak [sg.] to me!’, where the accent of the host *hábla* is unchanged by the extra syllable of the enclitic *me*.

(d) Inflections. These are always dependent and bound; that is to say, inflections by definition are always part of another word. Inflections reflect categories and properties of words such as gender, case, number, tense, aspect, and syntactic

relationships. In many languages, inflections are used to show agreement (“concord”) in these properties or categories with some other word, e.g., English *this shoe* versus *these shoes*, where the forms of the demonstrative *this/these* reflect the singular/plural contrast in *shoe/shoes*.

1.2.2 Clines

Basic to work on grammaticalization is the concept of a “cline” (see Halliday 1961 for an early use of this term). From the point of view of change, forms do not shift abruptly from one category to another, but go through a series of small transitions, transitions that tend to be similar in type across languages. For example, a lexical noun like *back* that expresses a body part comes to stand for a spatial relationship in *in/at the back of*, and is susceptible to becoming an adverb, and perhaps eventually a preposition and even a case affix. Forms comparable to *back of (the house)* in English recur all over the world in different languages. The potential for change from lexical noun, to relational phrase, to adverb and preposition, and perhaps even to a case affix, is an example of what we mean by a cline.

The term “cline” is a metaphor for the empirical observation that cross-linguistically forms tend to undergo the same kinds of changes or have similar sets of relationships, in similar orders. “Cline” has both historical and synchronic implications. From a historical perspective, a cline is conceptualized as a natural “pathway” along which forms evolve, a schema which models the development of forms (see Andersen 2001). Synchronically a cline can be thought of as a “continuum”: an arrangement of forms along an imaginary line at one end of which is a fuller form of some kind, perhaps “lexical,” and at the opposite end a compacted and reduced form, perhaps “grammatical.” Heine and his colleagues have suggested that the particular paths along which individual forms or groups of forms develop be called “grammaticalization channels” (see Lehman 1995[1982]) and the internal structure or relational patterns within these channels be called “grammaticalization chains” (Heine, Claudi, and Hünemeyer 1991a: 222; Heine 1992). The metaphors “cline,” “continuum,” “pathway,” “channel,” and “chain” are to be understood as having certain focal points where phenomena may cluster. Most importantly, they are metaphors for labeling grammatical phenomena, not putative neurological or other elements of the language capacity.

The precise cluster points on the cline (i.e., the labels preposition, affix, etc.) are to a certain extent arbitrary. Linguists may not agree on what points to put on a cline, nor on how to define the cline in a given instance. They also may not agree on whether a particular form is to be placed in the lexical area or the grammatical area of the cline. But the relative positions on a cline are less subject to dispute.

For example, most linguists would agree that there is a “cline of grammaticality” of the following type:

content item > grammatical word > clitic > inflectional affix

Each item to the right is more clearly grammatical and less lexical than its partner to the left. Presented with such a cline, linguists would tend to agree that, in so far as they schematically reflect cross-linguistic generalizations, the points (labels) on the cline could not be arranged in a different order, although individual items may violate the order language-specifically (Andersen 2001). A number of such clines have been proposed, based on the many different dimensions of form and meaning that are found in language. Generally, they involve a unidirectional progression in bondedness, that is, in the degree of cohesion of adjacent forms that goes from loosest (“periphrasis”) to tightest (“morphology”).

It is often difficult to establish firm boundaries between the categories represented on clines, and indeed the study of grammaticalization has emerged in part out of a recognition of the general fluidity of so-called categories. It has also emerged out of recognition that a given form typically moves from a point on the left of the cline to a point further on the right, in other words, that there is a strong tendency toward *unidirectionality* in the history of individual forms. We will discuss unidirectionality and ways of conceptualizing the cline in some detail in Chapter 5.

1.2.3 Periphrasis versus affixation

Often the same categories can be expressed by forms at different places in the clines. Thus in English we have expressions that are “phrasal” or “periphrastic” (literally “occurring in a roundabout fashion”) such as (6):

- (6)
- a. have waited (perfect tense–aspect)
 - b. the household of the queen (possessive)
 - c. more interesting (comparative)

It is also possible to express tense–aspect, possession, and the comparative through affixes or changes internal to the stem word. In this case the categories are bound to a host and are said to be expressed “morphologically” or “affixally” as in (7):

- (7)
- a. waited (past tense affixed *-ed*); sang (past tense signaled by internal change: contrast *sing*)
 - b. the receptionist’s smile (possessive affix *-s*)
 - c. longer (comparative *-er*)

The distinction between the periphrastic and morphological expression of a category is important for the study of grammaticalization because of two diachronic

tendencies. One is for periphrastic constructions to coalesce over time and become morphological ones. While this and other tendencies are discussed in more detail later, especially in Chapter 6, a couple of examples follow:

(a) Definite nouns are marked in many European and other languages with an article that is separate from the noun, for example, English *the newspaper*, French *la rue* ‘the street,’ German *die Stadt* ‘the city,’ etc. In such languages definiteness is marked periphrastically (cf. English *the five yellow newspapers*, where the article is at some distance from the noun). But in some languages this sign of definiteness is an affix, which can usually be shown to derive from an earlier definite article or demonstrative. Thus in Istro-Romanian³ the Latin demonstrative *ille* ‘that’ now appears as a suffix on nouns marking both definiteness and case, as in:

- (8) gospodar-i-lor
 boss-PL-DEF:GEN
 ‘of the bosses’

Here *-i* marks plural and *-lor* is the definite genitive plural suffix deriving from Latin *illorum*, the masculine genitive plural of *ille*. Similarly in Danish, *-en* in *dreng-en* ‘the boy’ and *-et* in *hus-et* ‘the house’ are definite singular markers for common gender and neuter nouns respectively, and have their origin in earlier postposed demonstratives (cf. Old Norse *úlfr-inn* ‘wolf-the’ from **úlfr hinn* ‘wolf-that’). In the modern languages they cannot be separated from the preceding stem.

(b) Various tenses and aspects of verbs are formed either with auxiliary verbs (i.e., periphrastic tense–aspect) or with verbal suffixes (i.e., morphological tense–aspect). Thus in Hindi the present tense is formed periphrastically by a verb stem plus the verb to *be*:

- (9) māi kursii par baiṭhaa hūū.
 I chair on sit: MASC SG be: ISG
 ‘I sit on a chair.’

In Swahili, on the other hand, basic tenses such as the future are formed morphologically, with prefixes on the verb:

- (10) Wa-ta-ni-uliza.
 they-FUT-me-ask
 ‘They will ask me.’

Morphological tense–aspect formations can often be shown to have developed out of earlier periphrastic ones. The Romance languages supply numerous examples of this, such as the Italian future *cantaremo* ‘we will sing’ or the French future (*nous*) *chanterons* from Latin *cantare habemus*, literally ‘we have to sing.’ We discuss this kind of development in the Romance languages in Section 3.3.1.

The second diachronic tendency that makes the periphrasis/bondedness distinction important is an example of what is known as “renewal” – the tendency for periphrastic forms to replace morphological ones over time. Where a long historical record is available, the process of renewal can be seen to occur repeatedly. The French future form just mentioned, for example, is the inflectional form (*nous*) *chanterons* ‘we will sing.’ But its Latin source, *cantare habemus*, was a periphrastic future that eventually replaced an older morphological future, *cantabimus*, after competing with it for several centuries. This form in turn evidently contains the verb **b^h umos* ‘we are,’ inherited from Indo-European, and can be reconstructed as an earlier periphrastic construction **kanta b^h umos*. French *nous chanterons* is itself being replaced by *nous allons chanter*, literally ‘we are going to sing.’ Something like the following sequence of changes can therefore be established:

- (11) Pre-Latin Latin French
 *?
 *kanta b^h umos > cantabimus
 cantare habemus > chanterons allons chanter > ?

At each attested stage two (or more) constructions compete (typically separated from one another by some nuance of meaning such as ‘we will’ versus ‘we are about to’), and eventually the periphrastic one wins out, undergoes coalescence of the two elements that comprise it, and may in turn be replaced by a new periphrastic form (Hodge 1970 provides examples of the renewal by periphrasis from several language families).

The terms “renewal” and “replacement” are somewhat problematic because they may suggest functional identity over time, and even gaps to be filled. In fact, however, it is not only the forms *cantabimus* and *cantare habemus* that differ; their exact semantic functions and syntactic distributions differ too, in so far as the overall set of tense options is necessarily different once the two forms coexist (other changes were also occurring elsewhere in the system, further reducing any potential identity). Unfortunately our available linguistic vocabulary or “metalanguage” for expressing the relationship between earlier and later linguistic phenomena is poor. We will not attempt to change it here, but will follow custom and use terms such as “replacement” and “renewal,” on the understanding that there is no exact identity over time (and, as will be discussed in Section 5.4.3, there are no gaps to be filled).

1.3 Some further examples of grammaticalization

We turn now to some relatively detailed examples of grammaticalization to illustrate several of its characteristics, and some of the problems of defining instances of it uniquely.

1.3.1 Lets

An initial example will be chosen from contemporary standard English also known as Present-Day English (or PDE for short). We begin with this example because it illustrates vividly that grammaticalization is an everyday fact of language. It results in not only the very familiar constructions of language such as *be going to*, but also many of the highly structured, semi-autonomous “formal idioms” of a language that make it unique, but are often regarded as peripheral (Fillmore, Kay, and O’Connor 1988).

In PDE there is a construction involving a second-person imperative with the verb *let*:

- (12) a. Let us go. (i.e., release us)
 b. Let yourself down on the rope.
 c. Let Bill go. (i.e., release Bill)

The understood subject of *let* is *you*. The objects of *let* in (a), (b), and (c) are all different: *us*, *yourself*, *Bill*, and may be passivized, e.g.:

- (12) d. We were let go.

Alongside the ordinary imperative construction with *let* in (12a-c) there is a construction sometimes called an “adhortative” (involving urging or encouraging), as in:

- (13) Let’s go to the circus tonight.

Quirk, Greenbaum, Leech, and Svartvik (1985: 829) refer to this construction as a “first-person imperative.” Here the subject of *let* is understood as ‘I’ as in something like ‘I suggest that you and I...’ *Us* is also the subject of the dependent verb rather than the object of *let*, and can therefore not be passivized: (12d) is the passive of (12a), not of the first part of (13).

Quirk *et al.* note the spread of *let’s* in very colloquial English to the singular of the first person:

- (14) Lets give you a hand. (i.e., let me give you a hand)

(We will represent the form as *lets* when the subject is other than the first-person plural.) Quirk *et al.* describe the *lets* here as “no more than an introductory particle” (1985: 830). In some varieties of English, the first-person-plural inclusive subject *us* of *lets* has been reinforced by *you and I* as in:

- (15) Let’s you and I take ’em on for a set.
 (1929, Faulkner, *Sartoris* III.186; *OED* let 14.a)

It has even been extended beyond first-person subjects of the dependent verb. The following examples are from Midwestern American speakers:

- (16) a. Lets you and him fight.
 b. Lets you go first, then if we have any money left I’ll go.

While (16a) was perhaps jocular (a third party egging on two others), the context of (16b) was quite neutral. In other instances there is no second- or third-person subject pronoun, and *lets* simply conveys the speaker’s condescending encouragement, e.g., in addressing a child or a truculent person:

- (17) a. Lets wash your hands. (Cole 1975: 268)
 b. Lets eat our liver now, Betty.

The development of the *lets* construction illustrates a number of characteristics of grammaticalization. Among these are:

(a) (12) shows that a full verb *let* ‘allow, permit’ has altered its semantic range in some way. We will suggest that grammaticalization in its early stages often, perhaps always, involves a shift in meaning (Chapter 4; see also Traugott 1989; Heine, Claudi, and Hünnemeyer 1991a). Furthermore, as mentioned in connection with *be going to*, this kind of shift occurs only in a highly specific context, in this case of the imperative *Let us...* A first approximation would be to say that the earlier idea of permission or allowing has become extended in one part of its paradigm to include a further one of suggesting or encouraging someone to do something. The sense of *let* has become less specific and more general; at the same time it has become more centered in the speaker’s attitude to the situation. This new construction has been available since the fourteenth century (Traugott 1995).

(b) (16) shows that the range of possible subjects of the verb dependent on *lets* is being extended from first-person plural to other persons. This was presumably made possible by the fact that *we/us* in English may be interpreted as inclusive of the addressee (‘I and you’) or exclusive of the addressee (‘I and another or others’). So long as the distribution of *let’s* is consistent with first-person-plural subjects in the dependent verb (e.g., ‘let’s indulge ourselves’), it may still be useful to analyze it as *let + us*. But this distribution has now spread to other persons, as suggested by example (14), *Lets give you a hand* (said by one individual to another), where *lets* is singular. As mentioned in connection with *be going to*, earlier meanings and functions typically persist. Thus (13–17) coexist with (12). Furthermore, the semantic changes proceed by small steps (permission to suggestion, first to second to third person).⁴

(c) A first-person-plural pronoun *us* became cliticized (*let’s*), and from the word-plus-clitic complex a single word was formed, *lets*. As suggested above, so long as the distribution of this form is consistent with the first-person-plural subjects of the dependent verb, it may still be useful to analyze it as a cliticized

form of *us*. But when this distribution spreads to non-first-person-plural subjects, we are not synchronically justified in continuing to do so. The final *s* of *lets*, then, is losing its status as a separate morpheme, and is in the process of becoming a simple phonemic constituent of a (monomorphemic) word. The historical trajectory:

(let) us > (let)'s > (let)s

illustrates a more general shift of

word > affix > phoneme

(cf. Givón 1979: 208–9; Hopper 1994)

(d) Once the monomorphemic stage has been reached, then the form becomes subject to further reduction. Since [ts] is often reduced in rapid speech to the sibilant, it is not surprising that *lets* [lets] often becomes *lets* [les]. It even goes further and in very colloquial speech is cliticized and attached to the following verb: *sgo, sflight*.

(e) Like other emergent constructions, *lets* in some sense fixes, or routinizes, a meaning or discourse function which was formerly freer (see Hopper 1987). It singles out one combination (in this case, *let + us*) from what was once a more extensive paradigm of equivalent forms, as in (18), and specializes it in a newly emerging function, the adhortative:

(18) Let him speak now or forever hold his peace.

This new function is provisional and relative rather than permanent and absolute; *lets* may not survive. However, for now a distinctive new grammatical resource has entered the language and is available to speakers for the building of interactive discourse.

(f) A final comment about the development of *lets* is that, although the stages are clearly very local and appear somewhat marginal, nevertheless they are part of a typological change affecting English. This is a shift which has been in progress for over two thousand years from an essentially “object–verb” system (as in *her saw*) with case and verb inflections, in other words, affixal constructions, to an essentially “verb–object” system (as in *saw her*) with prepositions and phrasal verb constructions, in other words, periphrastic constructions. We will discuss word-order shifts in more detail in Section 3.4.1. Here it must suffice to mention that in Old English, as in some other older Indo-European languages, the adhortative was expressed by the subjunctive, as shown in (19) (though a phrasal form with *utan* also existed).

(19) Cild binnan ðritegum nihta sie gefulwad.
child within thirty nights be: SUBJUNCT baptized
'Let a child be baptised within thirty nights.' (c. 690, Law Ine 1.1)⁵

The development of *lets*, then, is to be seen as among the class of innovations that are leading to a phrasal expression of the modalities of the verb, replacing an earlier inflectional expression. It is part of the very general change from a morphological way of expressing a function to periphrasis discussed in Section 1.2.3. The rise of the numerous auxiliary and auxiliary-like verbs and expressions of Modern Spoken English (such as *may, be going to, keep V-ing*, and others) is symptomatic of the same trend, which has been ongoing in English for many centuries (see Krug 2001).

1.3.2 A West African complementizer

Our examples so far have for the most part illustrated the development of verbs into grammatical markers of the kind usually associated with verbs, specifically tense, aspect, and mood. We turn now to a well-known example of a verb being grammaticalized into a connective, in this case a complementizer that introduces a finite complement clause. A finite complement clause is equivalent to an English *that*-clause in such constructions as:

(20) I know that her husband is in jail.

The verb which has the position of *know* in such sentences is called the “matrix verb,” and the clause introduced by the complementizer *that* is the “complement clause.”

Lord presents data from a number of African and Asian languages in which a locutionary verb meaning ‘say’ has come to function as a complementizer. Exotic as it may seem, such a construction is by no means unknown in English, cf.:

(21) *If/Say* the deal falls through, what alternative do you have?

We will cite examples from Lord’s work on languages of West Africa, all of them related members of the Kwa group of Niger-Congo spoken in Togo and Ghana, especially from Ewe (the examples that follow are from Lord 1976: 179–82).

The process leading to the grammaticalization of a ‘say’ verb into a complementizer evidently begins when a general verb meaning ‘to say’ is used to reinforce a variety of verbs of saying in the matrix clause. In Ewe, for example, if the matrix verb is the general verb *bé* ‘say,’ no further complementizer is needed:

(22) Me-bé me-wɔ-e.
I-say I-do-it
'I said, "I did it."/I said that I did it.'

However, if some verb of saying other than *bé* is the matrix verb, *bé* must be used as a complementizer:

- (23) Me-gblɔ bé me-wɔ-e.
I say say I-do-it
'I said that I did it.'

(where *gblɔ* is a different verb meaning 'to say').

The next stage is one in which *bé* comes to be used as a complementizer after a whole range of matrix verbs, including, for example:

- gblɔ 'say'
ɲɔ 'write'
lɔ dé édzi 'agree' (lit. 'accept reach top')
xɔse 'believe'
nyá 'know'
bu 'think'
vɔ́ 'fear, be afraid'
kpɔ́ 'see'
ɲɔ 'forget'
se 'hear, perceive'
ná 'make sure'

The verbs included are verbs of speaking, cognition, and perception. Since these are verbs which in most languages can have objects that are propositions (i.e., clauses), there is an obvious syntactic and semantic relationship between them and 'say.' Even so, the meaning and morphology of the 'say' verb is essentially lost in the process of grammaticalization as a complementizer. For example, in (24) we see that *bé* may no longer take verbal affixes such as person markers (compare *me-dí* 'I-want'), nor may it productively take tense-aspect markers.

- (24) Me-dí bé máɲle awua ɲewó.
I-want say I-SUBJUNCT-buy dress some
'I want to buy some dresses.'

Furthermore the original meaning of 'say' in such sentences is not easy to recover. Although some of its original context is maintained (it remains a form that introduces a noun clause), it has become available to many more contexts. From being a verb that introduces something said, it has become generalized to introducing other kinds of clauses, such as reports of things seen or thought.

As with English *be going to* and *lets*, the Ewe example shows not only a semantic but also a structural adjustment. Not only does the verb 'say' extend and perhaps even lose its original meaning of saying, but a construction originally consisting of two independent clauses is reanalyzed as a matrix verb plus a complement clause introduced by a complementizer. For example, (25) is reanalyzed as (26):

- (25) Megblɔ bé [mewɔe].
I-say say I-do-it
'I said I did it.'
- (26) Megblɔ [bé mewɔe].
I-say [say I-do-it]
'I said that I did it.'

We will return later to fuller discussion of reanalysis in Chapter 3. For the present, it is important to recognize that both semantic and structural reanalysis are major mechanisms in grammaticalization. We return in Chapter 7 to further consideration of the role of grammaticalization in clause combining.

1.3.3 Agreement markers

Our two examples have illustrated grammaticalization as the change whereby lexical items or phrasal constructions can come in certain contexts to serve grammatical functions. We now turn briefly to an example of the way in which already grammatical items can be used with more grammatical functions.

A frequently occurring change is the development of personal pronouns into agreement markers. In Latin there was a demonstrative stem *ill-* (inflected for case, number, and gender) pointing to location near third persons, in other words, it was a distal deictic. In French the forms of this demonstrative have developed along two lines. The fully stressed form became the pronoun *il*. The unstressed form became the article *le*. As a pronoun, *il* signals number (singular) and gender (non-feminine). It contrasts with *elle*, which is singular but feminine. In standard French *il* and *elle* serve personal pronoun functions only. Thus we find:

- (27) Le garçon est venu hier soir. Il est danseur.
the boy is come yesterday evening. he is dancer
'The boy came yesterday evening. He is a dancer.'
- (28) La jeune fille est venue hier soir. Elle est danseuse.
the girl is come yesterday evening. she is dancer
'The girl came yesterday evening. She is a dancer.'

But in non-standard French *il* has come to be an agreement marker. It does not fill a NP slot; instead it is bound to the verb and does not signal gender, as in:

- (29) Ma femme il est venu.
my:FEM wife AGR has come
'My wife has come.'

1.4 Grammaticalization and language structure

The examples we have sketched share such characteristics as the following:

- (a) earlier forms may coexist with later ones (e.g., English *let*, Ewe *bé*);
- (b) earlier meanings may constrain later meanings and/or structural characteristics (*bé* in Ewe occurs after verbs of perception, cognition, and saying). Such examples emphasize that language development is an ongoing process, and one that often reveals itself as change that is only incompletely achieved at any given stage of a language.

Ultimately, too, examples such as these suggest more general consequences for linguistic theory and even for our perspective on language itself. Examples such as Ewe *bé* challenge some standard descriptive and theoretical linguistic notions. One is that of categories. Is Ewe *bé* a verb or a complementizer, and what criteria do we apply in determining this? Are sentences such as (22)–(23) examples of direct speech or of reported speech? Is the clause following *bé* strictly speaking subordinated (embedded) as in PDE, or is it more loosely attached to the preceding clause? Do we need in our analyses to “stop the film” and fix the grammar of a language as we investigate its structure, or do we need to view “grammar” as a provisional way-station in our search for the more general characteristics of language as a process for organizing cognitive and communicative content?

1.5 Grammaticalization and the directionality of language change

The theory of grammaticalization as we have presented it in this preliminary chapter raises a number of important issues that cannot be discussed in detail here. One of these issues that has loomed large in recent debates over grammaticalization involves the robustness of the claim that there is directionality in grammaticalization. Examples like the reanalysis of a verb of motion as a future tense auxiliary (found in a number of languages), as in *I am going to need a sweater*, suggest a general principle at work. The principle that has come to be known as unidirectionality is an assertion about the change

less grammatical > more grammatical

that is fundamental to grammaticalization. Unidirectionality is a strong hypothesis that is based on observations about change, observations that lead to the conclusion that grammatical forms do not in general move “uphill” to become lexical, whereas the reverse change, whereby grammatical forms are seen to have their origins in lexical forms, is widespread and well documented.

Unidirectionality is a generalization derived from observations about language change in the same way that universals are derived from observations about language systems. Unidirectionality is in fact a widely attested characteristic of change. Potentials for change such as stop > affricate > fricative, the nasalization of vowels before nasal consonants, the word-final devoicing of obstruents, and many other phonetic changes are so commonly observed that they have the status of universals. Such changes can even be quite specific; if we find that one dialect of a language has [h] in positions corresponding to the velar fricative [x] in another dialect, most linguists would unhesitatingly assume a change [x] > [h] rather than the reverse, and would base their study of the relationship of the two dialects on this assumption until incontrovertible evidence forced them to amend it. Occasional counterexamples may exist, but they do not lead to the inference that [h] > [x] and [x] > [h] are events of equal probability, still less to the conclusion that change is random and that the study of change is noncumulative. The existence of counterexamples alerts linguists to the need for caution, and serves as a reminder that, like language systems, language change is not subject to exceptionless physical laws, and that diachronic universals, like synchronic ones, are observed tendencies rather than theoretical absolutes (see e.g. Greenberg, Ferguson, and Moravcsik 1978; Croft 1990). The typical paths of grammaticalization can guide the study of change in morphosyntactic structure in the same way that the identification of natural phonetic processes guides the study of phonological change, and can allow us to ascertain the more promising of alternative hypotheses about the origins of a given grammatical form and perhaps to track the stages in its emergence. As with any theoretical postulate, the frequent discovery of counterexamples and a failure to accommodate them within reasonable extensions of the theory could eventually invalidate it.

Like the study of universals, then, unidirectionality is an empirical as well as a theoretical matter. It is subject to question through the discovery of counterexamples, and to debate about its status in the theories surrounding language change. What kinds of counterexamples are there, and what do opponents and defenders of grammaticalization say about them? We return to discussion of these debates in Chapter 5.

1.6 Conclusion

The concepts of grammaticalization have now become part of the standard vocabulary of many linguists working in both synchronic and historical fields, and it is assumed as a useful and robust perspective in numerous descriptive studies of individual languages and language families. However, as in any branch of linguistics, not all those who work on grammaticalization conceptualize it in exactly the

same way. For us it is a two-pronged branch of linguistics: (i) a research framework for studying the relationships between lexical, constructional, and grammatical material in language, diachronically and synchronically, both in particular languages and cross-linguistically, and (ii) a term referring to the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions and, once grammaticalized, continue to develop new grammatical functions.

The bibliography of monographs, edited collections, and journal articles that adopt some aspect of grammaticalization as a given is now so extensive as to preclude anything like an exhaustive account of it. In the next chapter we will present an outline of the history of grammaticalization and a survey of some recent work, especially as it pertains to the rest of this book.

2

The history of grammaticalization

2.1 Introduction

Grammaticalization is the study of grammatical forms, however defined, viewed not as static objects but as entities undergoing change. It has had many practitioners, has been characterized in many different ways, and has occupied at various times both central and marginal positions in linguistics. In this chapter we will survey briefly the thought of some of the major figures in the early study of grammaticalization, mention some of the contemporary linguists who are interested in the subdiscipline, and briefly summarize some of the more recent developments. Other surveys of the history of grammaticalization can be found in C. Lehmann (1995 [1982]) and Heine, Claudi, and Hünnemeyer (1991a).

2.2 Earlier research on grammaticalization

The term “grammaticalization” itself was apparently coined by the French linguist Antoine Meillet, an Indo-Europeanist who at one time had been a student of Saussure. In a well-known definition, Meillet writes of “the attribution of grammatical character to an erstwhile autonomous word”¹ (“l’attribution du caractère grammatical à un mot jadis autonome”; Meillet 1912: 131). Yet Meillet’s ideas on the origins of grammatical forms have predecessors in earlier speculations that were often rooted in assumptions about the evolutionary development of human speech.

Perhaps the most sophisticated of these speculations about the origins of grammar was that proposed by the German philosopher and humanist Wilhelm von Humboldt (1767–1835). In a published lecture entitled “On the genesis of grammatical forms and their influence on the evolution of ideas” (“Über das Entstehen der grammatikalischen Formen und ihren Einfluß auf die Ideenentwicklung”) given in 1822 he suggested that the grammatical structure of human languages was preceded by an evolutionary stage of language in which only concrete ideas could

We give here an example of the same lexical item giving rise to both inflection and to periphrasis (but in local constructions with different word orders). We turn again to Romance. As we have seen, the Late Latin verb *habere* 'to have' was reanalyzed in postverbal (OV) position as a future inflectional marker. As Romance languages developed, a new periphrastic complex perfect construction emerged alongside of the future inflection, replacing the earlier perfect inflection -v-; e.g., *probavi* 'I have tried' was replaced by *habeo probatum*. This complex perfect, like the future, arose out of a *habere* construction, but in this case it originated in a construction consisting of an inflected form of *habere* 'to have' and a past participle that agreed with the object of *habere* (see, with somewhat different interpretations, Benveniste 1968; M. Harris 1978; Fleischman 1982; Vincent 1982; Pinkster 1987).

In Late Latin both the future and the perfect occur in both OV and VO orders. Thus we find:

- (21) a. *cantare habeo* ~ *habeo cantare* (OV ~ VO)
 b. *probatum habeo* ~ *habeo probatum* (OV ~ VO)

The type *cantare habeo* has been illustrated in (12), the type *habeo cantare* (with intervening material) in (9), (10), and (15). The type *probatum habeo* may be illustrated by (22a,b) and *habeo probatum* by (23):

- (22) a. *Promissum habeo... nihil sine eius*
 promised-NEUT:SG(?) have-1SG... nothing:NEUT:SG without his
consilio agere.
 advice do-INF
 'I have promised to do nothing without his advice.'
 (sixth century, Gregory of Tours; cited in Fleischman 1982: 120)
- b. *Quae cum ita sint, de Caesare satis hoc*
 which since thus be-SUBJUNCT, about Caesar enough this
tempore dictum habeo.
 time said have-1SG
 'Under the circumstances, I shall regard what I have said of Caesar as sufficient at present.'
 (c. 40 BC, Cicero, *Phil.* 5,52; cited in Pinkster 1987: 204)
- (23) *Metuo enim ne ibi vos habebam fatigatos.*
 Fear:1SG for lest there you have-IMPF-1SG tired
 'For I fear that I have tired you.'
 (early fifth century, Augustine; cited in Fleischman 1982: 120)

Both the future and the perfect eventually became fixed units and involved reanalysis of an inflected form of the independent verb *hab-* as dependent on the non-finite verb with which they occurred. They differ in that the path from *habere* to the future was via an obligative or future-oriented sense of the verb, whereas

the path from *habere* to the perfect was via the locative-possessive-existential in transitive contexts of cognitive and sensory states. Furthermore, in French the first became an inflection and the second remained as a periphrasis (though as we saw in connection with (15), the future remained a periphrasis in Sardinian). It appears that in French the future was grammaticalized while OV was still the chief word order for this construction, and that the perfect was grammaticalized later when the shift to VO had already taken place (Fleischman 1982:121), but in Sardinian the future was grammaticalized after VO had become the chief word order.

So far, we have discussed only shifts from OV to VO, both at the general level of verb phrase constituent structure and at the more local level of individual morphosyntactic changes. Before leaving the subject of word order, it is important to point out that a shift from OV to VO or vice versa never occurs independently of other factors, both linguistic and historical. Some of the linguistic factors involved have been noted in Mithun (1995); she shows how in an originally SOV family that includes Caddoan, Siouan, and Iroquoian, divergence in word order came about through a variety of means. These included, according to the language or language group: the development of third-person pronominal prefixes, the rise of case marking, and proliferation of noun incorporation, each of which served to dislodge a once rigid verb-final word order. Of historical factors, by far the most important is language contact, which often results in the adoption of new word-order patterns and changes in typological affiliation. An early study of this phenomenon was Bach's (1970) analysis of verb-final word order in Amharic, an Afro-Asiatic language that could be expected to show VO word order. Bach argued that certain linguistic rules of Amharic still required the positing of underlying VO word order, and attributed the superficial verb-final word order to the influence of neighboring Cushitic languages. Small-scale changes of this type can often be directly observed, as for example the shift in Estonian compounds from modifier-head to head-modifier order through Russian influence on the media (Hint 2000); Russian is an Indo-European SVO language, while Estonian is a Uralic language in transition between an earlier SOV and a newer SVO type.

3.5 Analogy/rule generalization

As we have seen, Meillet made a distinction between the development of new grammatical forms and arrangements on the one hand, and analogy on the other. The first, which he called grammaticalization, is the result of what we now call reanalysis. As we have defined it, reanalysis refers to the replacement of old structures by new ones. It is covert. Analogy, by contrast, refers to the attraction of

extant forms to already existing constructions, for example, the attraction of Ewe verbs of locution and cognition to the complementizer construction, modeled after *bé*. It is overt. In essence reanalysis and analogy involve innovation along different axes. Reanalysis operates along the "syntagmatic" axis of linear constituent structure. Analogy, by contrast, operates along the "paradigmatic" axis of options at any one constituent node (Jakobson and Halle 1956).

When Meillet was writing, there was a rather narrow, local interpretation of analogy, which was defined as a process whereby irregularities in grammar, particularly at the morphological level, were regularized. The mechanism was seen as one of "proportion" or equation. Thus, given the singular-plural alternation *cat-cats*, one can conceive of analogizing *child-children* as *child-childs* (as indeed occurs in child language):

- (24) cat: cats = child: X
X = childs

Or, as actually occurred in the history of English, given *stan-stanes* 'stone-stones,' *shoe-shoen* 'shoe-shoes' was analogized to the form now used in PDE:

- (25) stone: stones = shoe: X
X = shoes

The difficulty with the formula of proportion is that it gives no account of why one member of the pair is selected as the model. Since Meillet's time, a wide range of analogical processes has been identified (see Anttila 1977, and, for a summary, Kiparsky 1992). Kuryłowicz (1945-9) pointed to some tendencies regarding selection of the model, for example, the tendency to replace a more constrained with a more general form, not vice versa. Two decades later Kiparsky (1968) sought to redefine analogy in phonology as rule extension, thereby giving a formal account of the fact that analogy is not random in language change. He views analogy as generalization or optimization of a rule from a relatively limited domain to a far broader one. Of course, neither analogy as originally conceived nor rule generalization are required to go to completion: we still have *foot-feet*, *mouse-mice* alongside of *stone-stones*, and also *run-ran* alongside of *love-loved*.

Only reanalysis can create new grammatical structures. However, the role of analogy should not be underestimated in the study of grammaticalization. For one, the products of analogy, since they are overt, are in many cases the prime evidence for speakers of a language (and also for linguists!) that a change has taken place. Consider the development of the Romance perfect again. In (23) (repeated and reglossed here for convenience as (26)), accusative plural agreement is overt and determinable (*vos... fatigatos*):

- (26) Metuo enim ne ibi vos habebam fatigatos.
fear-1SG for lest there you:ACC:PL have-1SG tired-ACC:PL
'For I fear that I have tired you.'

However, in (22a, b) there is indeterminacy whether there is or is not agreement, since zero neuter singular (*nihil* 'nothing' in (22a), *satis* 'enough' in (22b)) is the "default" gender/number marker in Latin. With these constructions there is potential for reanalysis, but we recognize that the perfect has arisen only when there is overt and therefore determinable lack of agreement between object and participle (PART) as in:

- (27) Haec omnia probatum habemus.
those:ACC:PL all-ACC-PL tried-PART(?) have-1PL
'We have tried all those things.'

(sixth century, Oribasius; cited in Fleischman 1982: 120)

So long as constructions occurred which were ambiguous between adjectival participials and perfects, e.g., (26), it was not possible to tell whether reanalysis had occurred or not, except perhaps by inference from the context. Specifically, the agreeing participial, which originated in a passive adjectival form, permits the understood subject of the participial to be the subject of either the sentence or of some other entity. For example, in (26) the agent of the act of tiring could either be the subject 'I', as the translation 'I fear that I have tired you' suggests (i.e., perfect), or some other, unspecified, individual(s), as in 'I fear I have/see you tired' (i.e., participial). By contrast, the perfect requires that the understood subject of the participle is the subject of the sentence (Vincent 1982). It is only when clear instances of non-agreement, e.g., (27), occur, that we can find definitive overt evidence for the structure change. These unambiguously non-agreeing forms presumably arose by analogy (= rule generalization) from neuter singular contexts to other contexts.

A well-known example of the cyclical interaction of reanalysis, analogy (= generalization), and reanalysis is the development of negation in French. The sequence of changes must have been as follows (Hock 1991 [1986]: 194; Schwegler 1988):

- I. Negation was accomplished by placing the negative particle *ne* before the verb.
- II. A verb of motion negated by *ne* could optionally be reinforced by the pseudo-object noun *pas* 'step' in the context of verbs of movement:

- (28) Il ne va (pas).
he not goes (step)
'He doesn't go (a step).'

- III. The word *pas* was reanalyzed as a negator particle in a structure of the type *ne Vmovement (pas)*.
- IV. *Pas* was extended analogically to new verbs having nothing to do with movement; i.e., the structure was now *ne V (pas)*:
- (29) Il ne sait pas.
he not knows not
'He doesn't know.'
- V. The particle *pas* was reanalyzed as an obligatory concomitant of *ne* for general negation: *ne V pas*.
- VI. In the spoken vernacular *pas* came to replace *ne* via two stages: (*ne*) *V pas* (reanalysis of *ne* as optional), *V pas* (reanalysis by loss of *ne*), resulting in:
- (30) Il sait pas.
he knows not
'He doesn't know.'

In the case of the French negator *pas*, we would not know that reanalysis had taken place at stage III without the evidence of the working of generalization at stage IV. The reanalysis at stage VI would not have been possible without the generalization, since *pas* would have been too constrained by its original semantics of 'step.'

Although analogy is best viewed as generalization of a rule or construction, in practice it is often useful to maintain the term "analogy" when referring to certain local surface developments. For example, Mikola (1975: 170–2) describes the development in Samoyedic (Uralic) of locative postpositions out of older locational nouns, which were themselves preceded by a noun in the genitive, as in:

- (31) Proto-Samoyedic *mäto-*n* + in
tent-GEN + top
'the top of the tent'

The suffixed *-n* of the Uralic genitive came to be reanalyzed as an initial consonant on certain postpositions which were being grammaticalized out of nouns with meanings such as 'upper surface':

- (32) mäto + nîn
tent + onto
'onto the tent'

This change began as a typical case of reanalysis of morpheme boundaries: [mäto-#n##nîn] > [mäto-##nîn]. The reanalysis in turn yielded entire families of postpositions with an initial *n-*, the cognates of which may have initial vowels in other Uralic languages. We may speak of the generalization of *n-* here, but it is not

Table 3.1 Grammaticalization of VO word order in English between AD 1000 and AD 1500

	c.1000	c.1200	c.1300	c.1400	c.1500
Accusative object before verb	52.5%	52.7%	40+%	14.3%	1.87%
Accusative object after verb	47.5%	46.3%	60–%	85.7%	98.13%

Source: based on Fries (1940: 201)

a case of rule generalization, only of spread of *n-* in word formation (for a similar example from Maori, see Section 6.2.4).

So far we have considered analogy from the point of view of generalization of types of linguistic structure. There is, however, another important perspective on analogy: that of generalization through patterns of usage, as reflected by the frequency with which tokens of these structures may occur across time. We will be citing several recent examples of studies of frequency in subsequent chapters. Here we discuss an older, well-known example to introduce the method: Fries's (1940) study of word-order change in English in which the establishment of verb-object word order was traced through text counts at intervals of one hundred years. Among the relevant statistics concerning the position of the accusative object for the period AD 1000 to 1500 as presented by Fries are the figures in Table 3.1.

This method of analysis is a quantitative one. Quantitative analyses can be done taking various variables into account, such as spread across communities, or styles, or genres. The analysis by Fries that we have quoted, however, addresses only the variable of object before verb versus verb before object. In any quantitative analysis the linguist ideally takes a representative sample of texts at regular intervals over several centuries and traces the changes in form and meaning of a particular construction as a function of frequency of use in discourse. The kind of change characterized by the formula $A > A/B > B$ is viewed not from the point of view of types of construction (e.g., OV > VO, or periphrastic future > affixal future), but from the point of view of tokens (how often are OV and VO used over time, how often are periphrastic and affixal future used over time?). The quantitative diachronic method captures the progressive aggregation of instances of the newer B construction at the expense of the older A construction. In the case of Old English word order, the A construction is verb-final word order and the B construction is verb-initial word order. Typically, as here, the initial stage is already one of variation, and the final exemplified stage may still be in variation. Such quantitative studies highlight the gradualness of the spread of changes.

It should be mentioned that the gross numbers resulting from simple counts of pre- and postverbal objects such as are illustrated by Fries's figures conceal complex word-order adjustments involving differences such as those between pronoun

and noun, definite and indefinite NP, heavy and light NP, independent and dependent clause, and so forth. A more complete explanation of word-order change in Old and Middle English would include accounts of the structure of the clause as a whole, including the kinds of subjects that occur in the clause and where, the kinds of object that occur after or before the verb, whether the verb in preobject position happens also to be in V2 position or not, and so forth (see Bean 1983; Pintzuk 1999; papers on English in van Kemenade and Vincent 1997, for some representative studies).

3.6 The differential effects of reanalysis and analogy

From the perspective outlined here, reanalysis and analogy (generalization) are distinctly different mechanisms and have different effects. Reanalysis essentially involves linear, syntagmatic, often local, reorganization and rule change. It is not directly observable. On the other hand, analogy essentially involves paradigmatic organization, change in surface collocations, and in patterns of use. Analogy makes the unobservable changes of reanalysis observable. The interaction of reanalysis and analogy can be represented for the development of *be going to* from directional phrase to future as in Figure 3.2.

Stage I is the stage of the progressive with the directional verb and a purposive clause. Stage II is that of the future auxiliary with a verb of activity; it is the result of reanalysis. Stage III is that of the extension via analogy of the directional class of verbs to all verbs, including stative verbs. And Stage IV is the stage arising out of reanalysis of the complex auxiliary to a single morpheme *gonna*. Stages I, III, and IV all still coexist in PDE. In the next chapter we will discuss some further extensions of the distinctions between reanalysis and analogy, specifically with respect to meaning changes.

While much current research makes the type of distinction outlined here, it should be noted that it is most useful at the macrolevel, highlighting major shifts such as the OV > VO word order, or the development of auxiliaries discussed above. As work has progressed on defining the small steps of change that lead to such radical changes, and models of syntax using networks rather than rules have been developed, the sharpness of the distinction has been brought into question (e.g., Tabor 1994a,b). One of the problems has already been alluded to – evidence for reanalysis is largely found because of analogical generalization. Another issue is that analogy in the sense of rule generalization is itself a type of reanalysis, since under rule generalization the linguistic contexts in which a rule may operate are extended or reanalyzed. This is covert in the sense that structural contexts are highly abstract. Yet another issue is that where we have

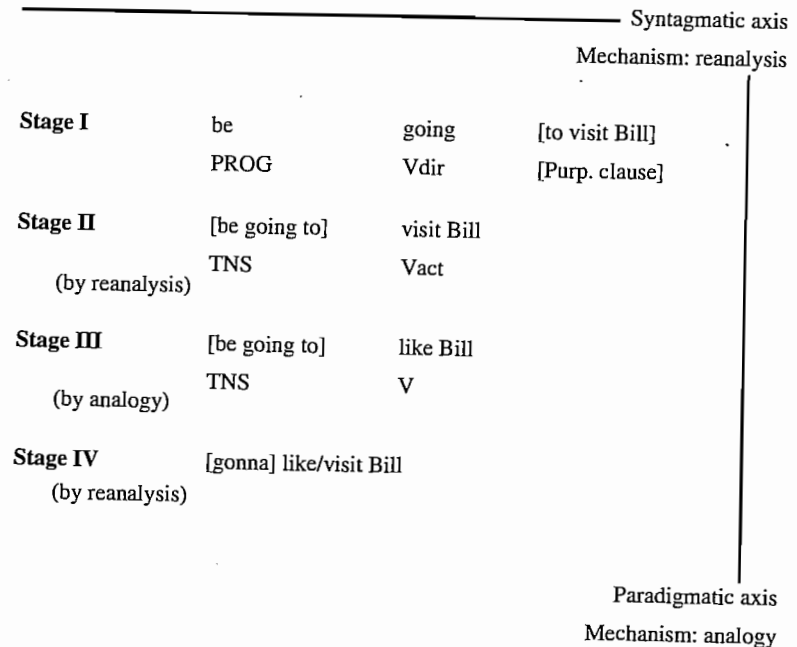


Figure 3.2 Schema of the development of auxiliary *be going to*

rich textual records, as in the case of the history of English and other European languages, or of Japanese and Chinese, corpus research reveals often minuscule differences between texts across time. Ultimately one might want to ask whether everything is not reanalysis. Nevertheless, the distinction is a useful heuristic for thinking about innovation (reanalysis) versus spread across the linguistic system (analogy). From this perspective we can say that reanalysis and analogy are the major mechanisms in language change. They do not define grammaticalization, nor are they coextensive with it, but grammaticalization does not occur without them. The subset of changes that are particular to grammaticalization are those that over time involve reanalysis of lexical items and constructions as functional categories. We will discuss this unidirectionality of change more fully in Chapter 5.

3.7 Conclusion

In this chapter we have discussed the mechanisms of reanalysis and analogy, and have shown that both play a crucial role in grammaticalization, though neither is coextensive with it. Furthermore, reanalysis is the dominant mechanism driving it. We have also outlined some fundamental assumptions about language

change, most particularly that it arises as a result of language acquisition by adults as well as children, and that it occurs because of abduction, the reasoning by which learners guess at systems. Much of the focus of this chapter, then, has been on perception. A dominant theme in work on grammaticalization since the 1970s has been the role of production in language change, most especially of ways in which speakers and hearers negotiate discourse strategies, and it is to this issue that we now turn.

4

Pragmatic factors

4.1 Introduction

Although it is possible to describe change in terms of the operation of successive strategies of reanalysis (rule change) and analogy (rule generalization), the important question remains why these strategies come about – in other words, what enables the mechanisms we have outlined, most especially those involved in grammaticalization.¹ It is tempting to think in terms of “causes” and even of “explanations” in the sense of “predictions.” However, the phenomena that give rise to language change are so complex that they will perhaps never be understood in enough detail for us to state precisely why a specific change occurred in the past or to predict when one will occur and if it does what it will be (Lass 1980). Rather than referring to “causes” or “explanations,” we speak more cautiously of motivations or enabling factors, understanding always that we are referring to potential and statistically preferred, not absolute, factors (see, among many others, Greenberg 1978b; Romaine 1982; Croft 2000; Maslova 2000).

As mentioned previously, among motivations for change three have been widely discussed in recent years. Of greatest interest within generative linguistics has been the role of language acquisition, especially child language acquisition. Sociolinguists, by contrast, have tended to focus attention on the role of communities and different types of contact within them. Of special interest to those working on grammaticalization has been the role of speakers and hearers negotiating meaning in communicative situations.

Here we put forward arguments for the view that there are a number of competing motivations which can all in some sense be said to be examples of maximization of economy or “simplicity”: basically they can be summarized as maximization of efficiency via minimal differentiation on the one hand, and maximization of informativeness on the other. On this view, hearers play a major role in change because they process input in ways that may not match the speaker’s intentions. But speakers also play a major role in enabling change, because in producing speech they have communication as their goal, and therefore are always in search of ways to guide the hearer in interpretation. In an ideal communicative situation,

apply to the truth of a proposition: X (a proposition) is obliged to be true" (Bybee and Pagliuca 1985: 73). In this view (modified in Bybee 1990), the process envisioned appears to be strictly speaking the schematic mapping of one concept onto another. Building on Talmy (1976, 1988), Sweetser takes a different approach to the modals, that of "sociophysical concepts of forces and barriers" (1990: 52). The *may* of permission is, according to Sweetser, understood in terms of "a potential but absent barrier," obligative *must* in terms of "a compelling force directing the subject towards an act." The force of *must* is "directly applied and irresistible," whereas that of *have to* is resistible under certain circumstances, cf.:

- (16) I have to/??must get this paper in, but I guess I'll go to the movies instead.
(Sweetser 1990: 54)

Sweetser regards the epistemic meanings of these modals as deriving from the tendency to experience the physical, social, and epistemic worlds in partially similar ways. This similarity in experience, she suggests, allows the mapping of sociophysical potentiality onto the world of reasoning. For example, with respect to *may*, she says: "In both the sociophysical and the epistemic world, *nothing prevents* the occurrence of whatever is modally marked with *may*; the chain of events is not obstructed" (p. 60). With respect to *must*, she gives the following analysis (p. 61):

- (17) a. You must come home by ten. (Mom said so.)
'The direct force (of Mom's authority) compels you to come home by ten.'
b. You must have been home last night.
'The available (direct) evidence compels me to the conclusion that you were home.'

She goes on to show that yet another metaphorical mapping is possible: of potential barriers to the conversational world (what is often called metalinguistic expression). Thus, in a hypothetical situation where Mondale's advisor is giving directions to a speech writer, the following might be imagined (p. 71):

- (18) Reagan will/must be a nice guy (as far as the content of the speech is concerned, even if we criticize his policies).

In other words, "the interlocutor is being allowed to treat a certain statement as appropriate or reasonable."

Can all possible types of metaphor be drawn on in grammaticalization? The answer appears to be no. Talmy (1983, 1988, 2000) has suggested that only certain types of spatial concepts are used cross-linguistically in grammatical items: specifically, topological concepts. Thus precise distances between points on a scale, or precise angles, do not grammaticalize. Indeed, angles in general (e.g., *corner in*

time) typically do not appear to grammaticalize.³ However, topological relations on a linear parameter frequently do so, e.g., *front-back, up-down*.

Sweetser has suggested that when a lexical item expressing a spatial concept is grammaticalized, only the topological concept is transferred. The concrete image associated with the lexical item is replaced by a more schematic one, and the meaning transfer "is to a fairly abstract, topological domain... so there is less fleshing-out of meaning" (Sweetser 1988: 393).

4.3.2 Metonymic processes

There is little doubt that metaphor is one process at work in grammaticalization. However, since reanalysis, not analogy, has for long been recognized as the major process in grammaticalization at the structural, morphosyntactic level, it would be surprising if metaphor, which is analogical, were the prime process at work pragmatically and semantically. In this section we show that other processes, which depend on contiguity and association in the flow of speech, also play a major part, and that some instances of grammaticalization that have heretofore been regarded as metaphorical can be seen to arise out of semantic contiguity rather than or as well as out of semantic analogy.

The overriding importance that metaphor was given in many discussions of grammaticalization during the 1980s and early 1990s seems to have derived in part from the tendency to think in terms of "lexical item > grammatical item," i.e., in terms of form, relatively independently of context rather than in terms of "use of lexical item in discourse > grammatical item," i.e., in terms of form in utterance contexts.⁴ For example, when the lexical item *go* is considered out of context and is said to grammaticalize to an auxiliary, metaphor is naturally invoked with respect to its spatial properties. But in fact it was not *go* that grammaticalized; the phrase *be going to* did, presumably only in very local contexts, e.g., that of *be going in order to V*. The contiguity with *to* in the purposive sense must have been a major factor in the development of the future meaning in *be going to* as an auxiliary (we discuss this point more fully below).

Another reason for the focus on metaphor was presumably also that the term metonymy had until that time been thought to be rather insignificant. For example, Dirven speaks of metaphor as a "major associative leap" but of metonymy as a "minor process" (1985: 98). Furthermore, in the tradition deriving from Jakobson and Halle's (1956) classic distinction between metaphor as choice functioning on the paradigmatic axis versus metonymy as association and sequence functioning primarily on the syntagmatic axis, metaphor was thought to lead to homogeneity and coherence, metonymy to juxtaposition and potential incoherence (J. D. Sapir 1977: 4). The term was used primarily for changes arising out of contiguity in

the non-linguistic world, cf. such examples as Lat. *coxa* 'hip' > Fr. *cuisse* 'thigh' (the parts of the body are spatially contiguous in the physical world), and *boor* 'farmer' > 'crude person' (association of behavior with a certain person or class of persons). One of the most famous examples is the transfer by association of the term for 'prayer' (OE *gebod*) to the objects by which a series of prayers was counted, the *beads* of a rosary (and ultimately, by generalization, to any beads). However, contiguity in the utterance, often resulting in ellipsis, had also been used as an example of metonymy, cf. French *foie* 'liver' < Latin *iecur ficatum* 'liver fig-stuffed.' Neither of these senses of metonymy is useful for the study of grammaticalization. However, conceptual association also involves metonymy, and in this sense (often known as "conceptual metonymy") the term is valuable. This sense can already be found in Stern, who, in speaking of "permutation," says it results from "a word [being] used in a phrase where a notion in some way connected with its meaning is liable to form an element of the context" (1931: 353). He goes on to list under examples of permutation the development of the logical meanings of *considering*, *supposing*, and of concessive *while*. More recently Anttila suggested that "[m]etaphor is semantic transfer through a similarity of sense perceptions," and is analogical and iconic, while metonymy is semantic transfer through contiguity and "indexical" (1989 [1972]: 141–2). In one of the first works in the last few decades to recognize the importance of metonymy in grammatical change, Brinton (1988) argued that the development of the English aspect markers, including *have*, is metonymically rather than metaphorically motivated.

Recently the fundamental importance of conceptual metonymy in language in general has been widely recognized. Indeed, there has been a major shift in thinking and it is coming to be increasingly recognized as "probably even more basic [than metaphor] to cognition" (Barcelona 2000: 4). As a cognitive process in which "one conceptual entity... provides access to another conceptual entity... within the same domain" (Kövecses and Radden 1998: 38), metonymy points to ("indexes") relations in contexts that include interdependent (morpho)syntactic constituents. In an utterance such as (19) the verb *go* invites the conversational inference that the subject arrived at a later time at the destination, and the purposive *to*, introducing a subordinate clause, invites the conversational inference that someone intended the marriage to occur:

- (19) I was/am going to be married. (in the sense 'I was/am going for the purpose of getting married')

However, this implicature can be canceled:

- (20) I was going/on my way to be married, but on the plane I changed my mind and decided to join the Army.

We hypothesize that the future meaning of *be going to* was derived by the semanticization of the dual inferences of later time indexed by *go* and purposive *to*, not from *go* alone. Indeed, we hypothesize that the inference from purposive *to* must have played a significant role in the grammaticalization of *be going to* given that the major syntactic change involved in the development of the auxiliary is the rebracketing of [[... be going] [to S]] as [... be going to V X] (Section 1.1). The progressive *be -ing* indexed activity in process, and so motivated the tendency for *be going to* to be interpreted as a purposive that was relevant to the reference time of the clause and likely to be imminent (see Bybee and Pagliuca 1987; Pérez 1990, who differ from the analysis presented here mainly in treating the change as a case of metaphorization).

To appreciate the importance of the relationship between *to* and *go*, in the development of auxiliary *be going to*, consider the following possible early instance:

- (21) Thys onhappy sowle... was goyng to be broughte into helle for the synne and onleful [unlawful] lustys of her body.
(1482, Monk of Evesham [OED go 47b])

This can be understood as an expression of motion in the context of the belief that after death the soul goes on a journey with the purpose of being rewarded or punished for actions in life. Note that in this example the passive demotes the inference that the subject of *go* is volitional or responsible with respect to the purposive clause. Because the destination of the journey (hell) is an adjunct not of *goyng to* but of *broughte*, the directionality of *going* is also demoted, and the inference of imminent future resulting from the purposes of the judges of the dead is promoted.

Similarly, in the passage in (22) the answer to *whither away* is (to) a messenger, and *I am going to deliver them* seems best understood as answering the question (why) *so fast?*, in other words, it seems more informative if it is inferred to answer the question in terms of purposes rather than directions:

- (22) DUKE: Sir Valentine, whither away so fast?
VAL.: Please it your grace, there is a messenger
That stays to bear my letters to my friends,
And I am going to deliver them.
(c. 1595, Shakespeare, *Two Gentlemen of Verona* III.i.51)

The full semanticization (and grammaticalization) of *be going to* is evidenced when the following subject and/or the verb is incompatible with purposiveness, for example, an inanimate subject or a verb of mental experience such as *hear*, or *like*. Once the semanticization of later time/future had occurred, the *will* future

could no longer be used with *be going to*, presumably because it had become partially redundant, and did not fit the auxiliary verb structure into which the construction had been absorbed. (Note, however, that the *will*-future can still occur in the main verb construction *be going to*, as in *I will be going to visit Aunt Mildred tomorrow*.)

The metaphor account, whereby a trajectory through space is mapped onto a trajectory in time, does not give adequate insight into why the progressive and most especially *to* are involved in the English expression *be going to*. This becomes particularly clear when we compare the cross-linguistic grammaticalization of the verb with the abstract meaning GO to future markers, each of which seems to have a slightly different history. Sometimes, for example, there is no overt purposive, in which case the future inference arises out of the directional verb and its associated aspect alone, as in French. Sometimes, however, GO may be grammaticalized into either a purposive or a temporal marker of imminence, as occurred to **bang* 'go' in Rama:

- (23) a. Tiiskama ni-sung-bang taak-i.
 baby I-see-SUB go-TNS
 'I am going in order to see the baby.'
 b. Tiiskama ni-sung-bang.
 baby I-look-at-ASP
 'I am going to look at the baby.' (Craig 1991: 457)

In each case inferences from the highly local contexts of the verb in its linear position within the clause appear to be the immediately motivating factors for change, though the capacity to create metaphors of time from space may well provide a cognitive framework that supports the changes.

We have suggested that semanticization of conversational inferences played a major role in the development of *be going to*. Another example is provided by the development of *while* (see Traugott and König 1991, on which the following discussion is based). This connective originated in OE in an adverbial phrase translatable as 'at the time that' consisting of the accusative distal demonstrative, the accusative noun *hwile* 'time,' and the invariant subordinator *þe*, a highly explicit coding of simultaneity, as in:

- (24) & wicode þær þa hwile þe man þa burg worhte
 and lived there that:DAT time:DAT that one that fortress worked-on
 & getimbrode.
 and built
 'And camped there at the time that/while the fortress was worked on and built.'
 (Chron A [Plummer] 913.3)

This phrasal expression was reduced by late OE to the simple conjunction *wile*:

- (25) Ðæt lastede þa [xix] wintre wile Stephne was king.
 'That lasted those 19 winters while Stephen was king.'
 (ChronE [Plummer] 1137.36)

In the process, the precise specification of simultaneity signaled by the demonstrative was lost, allowing for other, less precise, conversational inferences to play a part. One such inference is that the conditions specified in the subordinate clause serve not only as the temporal frame of reference for those in the main clause, but also as the grounds for the situation (the disasters lasted nineteen years because Stephen was king). Such an inference to grounds for the situation is dominant over temporality in some examples dating from the later fourteenth century:

- (26) Thar mycht succed na female,
 Quhill foundyn mycht be ony male.
 'No female was able to succeed while any male could be found.'
 (1375, Barbour's Bruce 1.60 [OED *while* 2a])

The causal inference from *while* did not become semanticized in English. However, in some languages this inference to the grounds for the situation has become the main extension of *WHILE*. For example, in German the temporal meaning of *weil* 'during' has become obsolete and the causal has become the main meaning; interestingly, causal *weil* came to be used in the latter part of the twentieth century with a concessive meaning (main clause rather than subordinate clauses syntax) (Günther 1996).

In English a different inference came to dominate, that of surprise concerning the overlap in time or the relations between event and ground. This led to the adversative, concessive meaning (cf. similar developments for *as long as*, *at the same time as*). Probable instances of the semanticization of surprise and hence concessivity appear in the early seventeenth century, among them:

- (27) Whill others aime at greatnes boght with blod,
 Not to bee great thou stryves, bot to bee good.
 'While others aim at greatness that is bought with blood, you strive to be not great but good.'
 (1617, Sir W. Mure, *Misc. Poems* xxi.23 [OED *while* 2b])

This could be interpreted as a statement about simultaneous behaviors. However, there is a strong inference, reinforced by the inversion in the second line, that it is unusual not to be bloodthirsty. Unambiguous examples of concessive meanings appear later, typically with present-tense stative verbs, e.g., *While you like peaches, I like nectarines*. The overall shift of *while* is from reference to a relatively concrete state of affairs (a particular time) to expression of the speaker's assessment of the

relevance of simultaneity in describing events, to assessment of contrast between propositions. In other words, it demonstrates a shift to a relatively abstract and subjective construal of the world in terms of language.

A similar development to increased subjectivity is evidenced by *be going to*; the motion verb requires that the direction of motion be anchored in the subject as well as in the speaker's viewpoint.⁵ But the auxiliary can be anchored in the speaker's subjective viewpoint alone, not in that of the subject:

(28) An earthquake is going to destroy that town. (Langacker 1990: 23)

An earlier example is:

(29) It seems as if it were going to rain. (1890, Cham. Jml. [OED go V.b])

Other examples of subjectification include the development of epistemic modals, for example the development of *must* in the sense of 'I conclude that' as in (17b) from *must* in the sense of 'ought' as in (17a) (Traugott 1989; Langacker 1990).

4.4 Metaphor and metonymy as problem solving

In discussing the principle of exploiting old means for novel functions, and the recruitment of concrete for more abstract terms, Heine, Claudi, and Hünemeyer suggest that:

grammaticalization can be interpreted as the result of a process which has **problem-solving** as its main goal, its primary function being conceptualization by expressing one thing in terms of another. This function is not confined to grammaticalization, it is the main characteristic of metaphor in general. (1991b: 150–1)

In other words, semantic change in general, not just grammaticalization, can be interpreted as problem solving (see also C. Lehmann 1985). One problem to be solved is that of representing members of one semantic domain in terms of another, and metaphoric strategies serve this purpose. The second problem is the search for ways to regulate communication and negotiate speaker–hearer interaction. We have shown that this is a kind of metonymic change, indexing or pointing to meanings that might otherwise be only covert, but are a natural part of conversational practice. The main direction of both types of problem solving is toward informativeness, but the two types correlate with shifts along different axes. Metaphorical change involves specifying one, usually more complex, thing in terms of another not present in the context. Metonymic change,

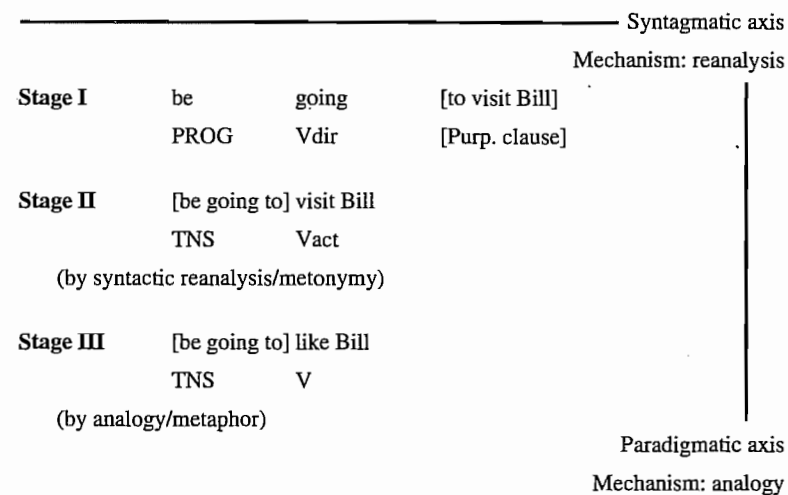


Figure 4.1 Revised schema of the development of auxiliary *be going to*

on the other hand, involves specifying one meaning in terms of another that is present, even if only covertly, in the context. It is largely correlated with shifts to meanings situated in the subjective belief state or attitude toward the situation, including the linguistic one. While metaphor is correlated primarily with solving the problem of representation, metonymy and semanticization of conversational meanings are correlated with solving the problem of expressing speaker attitudes.

In summary, metonymic and metaphorical inferencing are complementary, not mutually exclusive, processes at the pragmatic level that result from the dual mechanisms of reanalysis linked with the cognitive process of metonymy, and analogy linked with the cognitive process of metaphor. Being a widespread process, broad cross-domain metaphorical analogizing is one of the contexts within which grammaticalization operates, but many actual instances of grammaticalization show that conventionalizing of the conceptual metonymies that arise in the syntagmatic flow of speech is the prime motivation for reanalysis in the early stages. We can now refine the model for *be going to* outlined in Figure 3.2. to specify that syntagmatic reanalysis is accompanied by metonymic strategies, and paradigmatic, analogical change by metaphorical ones. The revised model is presented in Figure 4.1.

The competing motivations of expressivity (which underlies metonymic and metaphorical inferencing) and routinization, together with the mechanisms of reanalysis and analogy discussed in Chapter 3, will be shown in the next chapter to motivate the unidirectionality typical of grammaticalization.

4.5 Pragmatic enrichment versus "bleaching"

From very early times researchers on issues related to grammaticalization have observed that it involves loss of semantic content. This has been described by the metaphor of "fading" or "bleaching" (Gabelentz spoke of "verbleichen" 'to grow pale,' Meillet of "affaiblissement" 'weakening'). More recently, Heine and Reh characterized grammaticalization as: "an evolution whereby linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance" (Heine and Reh 1984: 15). Readers will have noted that in this chapter we have, however, spoken of pragmatic enrichment, strengthening, and so forth. This is because we have been discussing the beginnings of grammaticalization, that is, the motivations that permit the process to begin, rather than its outcomes. There is no doubt that, over time, meanings tend to become weakened during the process of grammaticalization. Nevertheless, all the evidence for early stages is that initially there is a redistribution or shift, not a loss, of meaning.

For example, with reference to the development of future *go*, Sweetser says: "we lose the sense of physical motion (together with all its likely background inferences). We gain, however, a new meaning of future prediction or intention – together with its likely background inferences" (Sweetser 1988: 392). In speaking of the subjectification of *be going to*, Langacker draws attention to the loss of objective locational reference points that movement entails, and suggests that this loss is replaced by realignment to the speaker's temporal perspective (1990: 23). In other words, one meaning is demoted, another promoted.

As grammaticalized forms become increasingly syntacticized or morphologized they unquestionably cease over time to carry significant semantic or pragmatic meaning. This can most clearly be seen when former lexical items become empty syntactic elements, as in the case of *do*, or when formerly separate morphemes become bound and serve primarily as "morphological detritus" after repeated fusion (see Chapter 6). An excellent example is provided by the development of French *ça* 'that,' a form which is the worn-down relic of several stages of expressive reinforcement:

- (30) hoc 'that' > (ecce) hoc 'behold that' > eccehoc > ço > ce > ce(là) 'that there' > celà > ça
(Lüdtke 1980: 212)

The individual meanings of *hoc*, *ecce*, and *là* have been lost, as has the form's distal demonstrative function (M. Harris 1978: Chapter 4).

Two general working principles arise out of our understanding of the processes of inferencing in grammaticalization. One is that the meanings will always be derivable from the original lexical meaning by either metaphorical or conceptual metonymic inferencing. Therefore meaning changes in grammaticalization are not

arbitrary. Secondly, since the initial phase of grammaticalization involves a shift in meaning, but not loss of meaning, it is unlikely that any instance of grammaticalization will involve a sudden loss of meaning.

One of the most well-known examples of grammaticalization in English, the development of "empty" *do*, has been treated mainly as an example of syntactic change, and might be regarded as a counterexample. There has been considerable speculation about its origins. Causative *do*, as in (31), has been thought to be one source (Ellegård 1953):

- (31) þe king sende efter him & did him gyuen up ðat abbotrice of Burch.
'The king sent for him and made him give up the abbey of (Peter)borough.'
(Peterb. Chron 1132 [MED don 4a])

Denison (1985) and Stein (1990a) have suggested that grammaticalization occurred not simply via loss of causative meaning, but via a perfective meaning, which can arise via pragmatic strengthening particularly in past tense causative contexts. For example, we can interpret *dide him gyuen up ðat abbotrice* in (31) as representing not only that the king's making him do something occurred in the past, but also that the action (give up his abbey) was achieved. This perfective meaning demotes the issue of who undertook the action, and permits the inference that the action is the significant issue. This is particularly likely to occur in constructions without an overt subject of the non-finite clause following *do*. For example, in (32) the subject ('they') may have caused the women to be mocked, but the absence of an overtly expressed intermediary party between the mockers and their victims demotes the causality and promotes the accomplishment (perfectivity) of the action:

- (32) And so thei dede bothe deseieue ladies and gentilwomen, and bere forthe diuerse langages on hem.
'And so they both mocked ladies and gentlewomen, and made various allegations against them.'
(c. 1450, Knt. Tour-L, 2.24; cited in Denison 1985: 50)

There are some problems with the causative analysis, however, among them the fact that many instances of *do* in Middle English in the area in which it developed (southwest England) were and continue to be habitual in meaning (Garrett 1998). Garrett cites several modern examples such as this one from Somerset:

- (33) The surplus milk they did make into cheese and then the cheese did go to the different markets, that's how that did work.
(Garrett 1998: 292, citing Ihalainen 1976: 615)

Whatever the final analysis turns out to be, the point is that sudden emptying of meaning is not expected. Furthermore, it is incumbent on the researcher to seek a plausible set of inferences that enable changes to occur.

Perhaps the most damaging evidence against the automatic association of bleaching and sudden emptying of meaning with grammaticalization comes from evidence that later constraints on structure or meaning can only be understood in the light of earlier meanings. In other words, when a form undergoes grammaticalization from a lexical to a grammatical item, some traces of its original lexical meanings tend to adhere to it, and details of its lexical history may be reflected in constraints on its grammatical distribution. This phenomenon has been called "persistence" (Hopper 1991).

An example is provided by Lord's discussion of the development in West African languages of object markers ("accusative cases") out of former serialized verbs like 'take.' In Gã (a Benue-Kwa language of West Africa), the form *kè* is an accusative case marker in sentences such as:

- (34) È kè wòlò ñmè-sì.
she ACC book lay-down
'She put down a book.'
(Lord 1993: 118)

It was originally a verb meaning 'take' (see Lord 1993: 53-6) which has become grammaticalized as an accusative case marker, and sentences such as these are historically of the type 'He took a book [and laid [it] down.' Certain restrictions on the distribution of this case marker can only be understood from the point of view of its origin in the meaning 'take.' Let us for a moment consider a language which has a fully developed accusative case marker, Latin. In Latin, accusative is a general marker of direct objects. The Latin accusative case occurs (to a large extent) irrespective of the semantic relationship between the verb and its object. Accusative objects in Latin may be perceived, produced, ordered, imagined, and so on. With a few exceptions, any noun which has the role of an object is marked as an accusative.

Gã is quite different from Latin in this respect. Consider, for example, (35a) and its ungrammatical counterpart (35b):

- (35) a. È ñmè wòlò.
she lay egg
'She laid an egg.'
b. *È kè wòlò ñmè.
*she ACC egg lay
(Lord 1993: 120)

The semantic relationship between verb and object in 'laid down the book' is quite different from that in 'laid an egg.' In the first, the object is changed (moved, grasped, etc.) through the action of the verb; the object is "affected" (Lord 1982; Hopper 1986a). In the second, the object is produced or brought about by the action of the verb; the object is "effected." The accusative case marker in Gã can only be used if the object is "affected." For this same reason, the accusative case marker *kè* is inappropriate if the verb is one of experiencing:

- (36) a. Tètè nà Kòkà.
Tete saw Koko
'Tete saw Koko.'
b. *Tètè kè Kòkà nà.
*Tete ACC Koko saw
(Lord 1993: 120)

These kinds of constraints exist because Gã retains the restriction on accusative case marking which derives from the historical antecedent of this grammatical morpheme in the lexical verb 'to take': only objects which can be 'taken' are marked morphologically as accusatives.

Persistence of old meanings is a common phenomenon. Some differences in the meanings of the Present-Day English tense/modal auxiliaries reflect possibilities of meaning which have existed for over a thousand years. Bybee and Pagliuca show that: "the differences in the uses of these future markers [i.e., *will*, *shall*, *be going to*, PH and ET] can be understood as continuations of their original lexical meanings" (Bybee and Pagliuca 1987: 117). As mentioned in connection with example (2), there are several polysemies of the "future" *will*. These include prediction (the "pure" future), willingness, and intention. Bybee and Pagliuca show that two of these meanings were already implied in Old English. (37) exemplifies willingness, (38) intention:

- (37) Gif he us geunnan wile, þæt we hine swa godne gretan moton...
if he us grant will, that we him so generous greet should...
'If he will/is willing to grant that we should greet him who is so gracious...'
(*Beowulf* 346-7;⁶ cited in Bybee and Pagliuca 1987: 113)
- (38) Wen' ic þæt he wille, gif he wealdon mot, in þæm guðsele
think I that he will, if he prevail may, in the war-hall
Geotena leode etan unforhte.
of-Geats men eat unafraid
'I believe that he will, if he should prevail, devour the people of the Geats
without fear in their war-hall.'
(*Beowulf* 442-4; cited in Bybee and Pagliuca 1987: 113)

The "predictive" future has developed out of the intention/promise use of *will*. Bybee and Pagliuca show that the future meaning becomes established in the Middle English period when inanimates incapable of volition begin to appear as the subjects of *will* (see also Aijmer 1985). When this happened, it did not result in an across-the-board re-semanticization of *will*; the predictive future remains only one of several distinct meanings of *will* in Present-Day English. All that happened was that a new meaning was added to an already polysemous form, and thus new distributional possibilities were opened up for the form. Furthermore, the fact that *will* and *be going to* do not mean the same thing (*be going to* expresses present orientation and a goal-directed plan), is attributable to the fact that the latter had progressive and directional origins while the former did not.

The process of demotion of some lexical meanings and promotion of others is characteristic of semantic change in general. Those lexical meanings that are promoted in grammaticalization tend to be relatively abstract, and particularly relevant to expression of temporality, role relationships, connectivity, etc. (i.e., “grammatical meanings”). Furthermore, they tend to be the ones most salient in the original contexts/formulae within which grammaticalization takes place (e.g., intention regarding the future is salient in the contexts relevant to the grammaticalization of *be going to*). These originally salient meanings tend to persist over time and to constrain the later uses of the grammaticalized form. “Bleaching” must therefore be taken to be a very relative notion, and one that pertains almost exclusively to late stages of grammaticalization. An important question for future research is what exactly constitutes bleaching, when it can be said to set in, and how it correlates with morphosyntactic generalization.

4.6 Conclusion

We have argued that grammaticalization can be thought of as the result of the continual negotiation of meaning that speakers and hearers engage in. The potential for grammaticalization lies in speakers attempting to be maximally informative, depending on the needs of the situation. Negotiating meaning may involve innovation, specifically, pragmatic, semantic, and ultimately grammatical enrichment. It is largely motivated by metonymic and metaphorical inferencing. These are complementary processes linked with the dual mechanisms discussed in Chapter 3: reanalysis (linked with metonymy), and analogy (linked with metaphor). As innovations come to be adopted by members of the community, they may be subject to maximization of signal simplicity, and ultimately to various types of reduction, typically semantic bleaching, morphological bonding, and phonological attrition. It is to the unidirectional changes in structuration that arise from these diachronic processes that we now turn.

5

The hypothesis of unidirectionality

5.1 Introduction

Grammaticalization as viewed from the diachronic perspective is hypothesized to be prototypically a unidirectional phenomenon. In this chapter we elaborate further on some general principles of unidirectionality, with particular attention to such diachronic issues as generalization, decategorialization, increase in grammatical status, and renewal. We will also discuss synchronic issues such as the resultant variability and “layering” arising from those diachronic processes. The hypothesis of unidirectionality is a strong one, and has been the subject of vigorous debate since the 1990s; in Section 5.7 we summarize this debate, and conclude that the counterexamples to unidirectionality that have been adduced so far are sporadic, whereas the evidence for unidirectionality is systematic and cross-linguistically replicated. In Chapter 6 we will discuss in more detail some well-known kinds of unidirectionality found in morphological change, that is, in the later stages of grammaticalization. In Chapter 7 we will suggest that similar types of unidirectionality also occur in morphosyntactic change, especially the development of complex clauses.

Once grammaticalization has set in, there are certain likely paths along which it proceeds. One path discussed by Meillet is that whereby a lexical item becomes a grammatical item, summarized as:

lexical item > morphology

As mentioned in Section 2.2, one of Meillet’s examples was the Modern Greek future particle *tha*, as in:

- (1) Tha tēlefonēsō tou patéra mou.
 FUT telephone DEF:ACC father:ACC my:ACC
 ‘[I] will telephone my father.’

Meillet said that the source of *tha* is the Classical Greek *thelō hina* ‘I wish that.’ In the preceding chapters we have discussed examples that suggest this formulation of the path of grammaticalization is not quite right. The path is not directly from