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

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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 form 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."
- (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 *ba hwile be* '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 crosslinguistically 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 Hünnemeyer 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

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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) mãi kursii par baithaa hũũ. I chair on sit: MASCSG 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 *k 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:

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, sfight.
- (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 oritegum 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 $b\dot{e}$ '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 $b\acute{e}$ is the matrix verb, $b\acute{e}$ must be used as a complementizer:

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(23) Me-gblo bé me-wo-e.
I say say I-do-it
'I said that I did it.'
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(where gblo is a different verb meaning 'to say').

The next stage is one in which $b\acute{e}$ comes to be used as a complementizer after a whole range of matrix verbs, including, for example:

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gblo 'say'
nlo 'write'
lõ dé édzi 'agree' (lit. 'accept reach top')
xose 'believe'
nyá 'know'
bu 'think'
vố 'fear, be afraid'
kpố 'see'
nlo '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 $b\acute{e}$ may no longer take verbal affixes such as person markers (compare $me-d\acute{t}$ 'I-want'), nor may it productively take tense–aspect markers.

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(24) Me-dí bé máple awua dewó.

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) Megblo bé [mewoe].

 I-say say I-do-it
 'I said I did it.'
- (26) Megblə [bé mewəe].

 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.' (Lambrecht 1981: 40)

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 $b\acute{e}$);
- (b) earlier meanings may constrain later meanings and/or structural characteristics ($b\acute{e}$ 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 $b\acute{e}$ challenge some standard descriptive and theoretical linguistic notions. One is that of categories. Is Ewe $b\acute{e}$ 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 $b\acute{e}$ 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.