Introduction

This paper is a preliminary attempt to present, in outline form, those parameters that are necessary in the construction of a linguistic theory of tense, taking tense in its strict sense of 'grammaticalization of time location'. The data base, unlike that of many recent general accounts of tense, is based on observations of tense in a wide range of language, many of which evince phenomena that are not found in the majority of European languages. In this way, the paper attempts to combine the typological approach with the aim of contributing to general linguistics (more specifically, semantic) theory. The parameters and definitions that are proposed are proposed not for purely aprioristic reasons - although they do add up to a coherent system -, but because they prove useful and necessary in the characterization of tense both within individual languages and across languages. Many points are necessarily presented briefly in the space available: for further details, including critical comparison with other approaches (e.g. Reichenbach, 1947: 287-298), reference should be made to Comrie (in preparation).

1. Defining the Problem

In the Introduction, we noted that we use the term tense here in its strict sense of 'grammaticalization of time location'. In particular, this means that we exclude expression of time reference by lexical means (e.g. today, soon, formerly) or by freely formed syntactic constructions (e.g. two years ago, in the distant future). Second, we exclude those facets of time reference that are concerned not with the location of situations (events, processes, states) in time, but rather with the internal structure of situations: in other words, we exclude aspect from consideration; for our views on aspect, reference may be made to Comrie (1976). Since traditional grammar often uses the term tense to cover both tense and aspect phenomena, as in the characterization of the Portuguese Preterite (Pretérito Perfeito) and Imperfect (Pretérito Imperfeito) as tenses, this distinction should be carefully borne in mind.

In the definition of the semantic content of any grammatical category, the general linguistic problem of the relation of form to meaning arises, and this is
no less (or, perhaps, more) true of tense than of other categories. The strongest claim that one could make is that a given category has a single invariant meaning (Gesamtbdeutung) that is present in all its uses. A somewhat weaker claim is that a given category has a basic meaning (Grundbedeutung), or in certain instances a set of basic meanings, which accounts for the core of its uses, although individual uses may depart to a greater or lesser extent from this core (prototype). In the present paper, in large measure as a reaction to the concrete data encountered, we operate with basic meanings rather than necessarily with general meanings. We thus expect to find a given tense occurring in certain uses that violate its basic meanings, and are conditioned by factors other than location in time: in English, for instance, the sentence I just wanted to ask you a small favor, with the Past tense, can be used to refer to a present wish to ask a favor, in which case it expresses a greater degree of politeness than would the Present tense. (Note our convention of using upper-case initials to refer to language-specific categories, lower-case initials to refer to conceptual categories).

Another important distinction that must be borne in mind, to avoid confusion, is that between the meaning of a category on the one hand and Gricean conversational implicatures that may frequently be drawn from its use, but which are not strictly part of its meaning. For instance, many native-speakers of English are prepared to maintain, at first sight, that use of the Past Habitual (e.g. John used to belong to the Rotary Club) includes, as part of its meaning, that John no longer belongs to the Rotary Club (exclusion of present time reference). And, indeed, if this sentence is presented in isolation, the hearer is most likely to draw this conclusion. However, the fact that this is not strictly part of the meaning can be seen by using the sentence in a broader context: John used to belong to the Rotary Club, and (as far as I know) he still does, where the actual or potential location of 'John belong to the Rotary Club' to the present time does not lead to any internal contradiction. In the present paper, we are concerned with meaning, to the exclusion of conversational implicatures.

2. Time Relations

In order to locate a situation in time, it is necessary to locate it relative to some fixed point in time: the reference point. The problem of reference points, in many ways the crux of the characterization of tense in linguistics, is discussed in section 3, while the present section looks at the time relations that may hold between the situation being located and the reference point.

The main parameter of relevance here is that with the values anterior - simultaneous - posterior, corresponding (especially when the reference point is the moment of speech) to the traditional parameter past - present - future. It should be noted that 'simultaneous' (and, more obviously, 'anterior' and 'posterior', mutatis mutandis) does not necessarily mean that the situation and the reference point are coterminous, but rather that they overlap: to the extent that the termini of the situ-
ation are specified grammatically, this is done by means of aspect: in particular, we are aware of no clear case of a language with a Universal tense, i.e. a special grammatical form with as its basic meaning reference to situations of universal validity, through all time. In addition, the use of a tense to locate a situation in a given time-space (e.g. anterior to the moment of speech) does not exclude the possibility that the situation may also hold in other time-spaces, although it may carry this exclusion as a conversational implicature: compare the discussion of the English Past Habitual in section 1.

A second parameter that must be added is that of degree of remoteness from the reference point, since many languages recognize grammatical categories distinguished by degree of remoteness: while such a distinction is marginal, at best, in European languages, it is widespread in, for instance, the languages of Sub-Saharan Africa. A distinction between Recent Past and Distant Past is common, but more prolific systems are also found: Yandruwandha, an Aboriginal language spoken in the north-east of South Australia, distinguishes five degrees of remoteness in the past (Breen, 1976: 755), while Bamileke-Dschang, a Grassfields Bantu language of Cameroon, has a five-way distinction in both past and future (Hyman, 1980). While Bamileke-Dschang represents the greatest degree of differentiation so far attested on this parameter, it is doubtful whether one can establish in principle an upper limit to the number of degrees of remoteness that may be distinguished.

Many languages have grammatical categories that represent more or less complex Boolean functions on the above-mentioned parameters. Finnish, for instance, is a clear example of a language that distinguishes Past from Non-Past, the latter subsuming both present and future. The Portuguese Perfect (Presente Composto) combines two facets of time location (the situation must have held at some time in the past, and must also have held up to, but not necessarily including, the moment of speech) plus one of aspect (the situation must have held regularly between the two time points).

3. Reference Points

There are several logically possible ways in which reference points could be established, and we consider it significant that only a very small subset of these logical possibilities is made use of grammatically in language - although the other possibilities are expressible lexically or phrasally.

One possibility would be to locate situations before, simultaneous with, or after some other situation of major significance to the culture in question, such as 'before/during/after the Golden Age', 'before/during/after the birth of Christ'. While phrasal expression of such reference points is the rule for calendar systems, we are aware of no language that grammaticalizes time location relative to such a reference point.

A second possibility would be to locate situations relative to some cyclically recurrent event, e.g. the passage of the seasons or of the parts of the day, a kind of time location that is frequent lexically and phrasally (e.g. at night,
by day). With an expression meaning 'at night', one can locate a situation as holding during the hours of darkness, although it is not clear which night(s) is/are being referred to. In a few languages, grammaticalization of such time reference does seem to be attested. For instance, in Yandruwandha (already mentioned in section 2) there are bound suffixes meaning 'in the daytime', 'in the morning', 'at night' (Breen, 1976: 755). The Yandruwandha data are particularly interesting in that the suffixes are not relatable, at least synchronically, in form to separate lexical items, and that Yandruwandha does not allow incorporation into verbs (which might permit incorporation of time adverbials on a par with other kinds of incorporation). However, in all the sporadic examples of such cyclic reference points known to us, expression of the cyclic reference point is optional, and cooccurs with obligatory expression of more conventional reference points, i.e. the cyclic reference points are at least less grammaticalized than the other reference points.

The reference point most frequently discussed in traditional accounts, and the one most prevalent in European languages (at least) is the moment of speech. The relations anterior, simultaneous, and posterior, when applied to the moment of speech, give the traditional terms past, present, and future. Time location relative to the moment of speech is often referred to as absolute tense.

Opposed to absolute tense is relative tense, where the time relations are applied not to the moment of speech, but to some other reference point established by the (linguistic or extralinguistic) context. In many European languages, nonfinite verb forms have, or at least can have, relative tense interpretations, as in English those standing outside were invited in, where standing is interpreted as simultaneous with the (absolute) Past tense were invited. In many English-based Creoles, a particle like go is used to indicate relative anteriority, i.e. that a given situation held before the time of the main description or narrative.

Perhaps the most interesting area of research relating to reference points, and one that has been surprisingly superficially investigated even in some of the major European languages, in the way in which complex time locations can be built up by means of a series of reference points, i.e. combined absolute-relative tense. Thus the Pluperfect (or the Portuguese Pretêrito Mais-Que-Perfeito) locates a situation anterior to a reference point that is itself anterior to the moment of speech (i.e. two reference points, one absolute and one relative). The Future Perfect locates a situation anterior to a reference point that is itself posterior to the moment of speech, without, incidentally, establishing any direct time relation between the situation and the moment of speech: if I say John will have finished before you return, I make no commitment as to whether John's finishing will take place in the absolute past, present, or future, but only that it will be anterior to your return (though there is a conversational implicature that it is not the case that I know that John has already finished). Even more complex relations are possible, as in the following English example: Bill left for the city with a heavy heart; by the time he returned, the fields would have been covered with concrete. The Conditional Perfect would have been covered lo-
cates a situation (being covered with concrete) as anterior to a reference point (Bill's return) that is posterior to a reference point (Bill's departure) that is anterior to the moment speech, i.e. three reference points in all!

Conclusions

We have suggested that the tense systems of natural languages, in the sense of grammaticalization of time location, can be defined in terms of a very small number of parameters - small, certainly, in relation to the wide range of logical possibilities, in particular of those that can be expressed lexically or phrasally. Yet even apparently simple combinations of these parameters can give rise to systems of great subtlety: morely from the tenses of the sentence John said that Bill would finish before Harry returns, the speaker of English can make not only the obvious deduction that John spoke in the past, but also that Harry has not yet returned (exclusion of nonfuture), while Bill may or may not yet have finished.

REFERENCES:


