W. D. C. de Melo
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Linguistic Typology: Tense, Aspect, Mood

In previous weeks we looked at how languages code events. The action is normally expressed by a verb, and agents and patients are expressed by nouns in various cases and / or sentence positions. These were the elements making up events. Today we are looking at how such events as a whole can be located in time or treated as imagined etc. This can be done by marking them for tense, aspect, and mood.

Tense, aspect, and mood are linguistic categories corresponding to the extralinguistic categories of time and modality. Tense locates an event on the time axis and indicates for example whether it took place in the past or whether it is going to take place in the future. Aspect marks 'event-internal' time and indicates for instance whether an event is ongoing. Mood marks modality, that is, the status of an event as real, imagined etc.

Tense, aspect, and mood concern events, not just verbs. But since verbs are the central elements of events, these categories are normally either marked as morphemes of the central verb, or they are expressed by auxiliary verbs forming part of the verb phrase as a whole.

The categories tense, aspect, and mood are easy to distinguish as concepts, but in individual languages they are normally not independent of each other. For example, a morpheme expressing tense often expresses aspect at the same time, and a mood which presents an event as imagined rather than real frequently allows for fewer tense distinctions than a mood which presents an event as real.

Just like most detailed studies of tense, aspect, and mood, today's lecture is more of an inventory than a predictive tool.

Tense

Tenseless languages

Tense is a deictic category because it locates an event in time. In fact, tense is the grammaticalized expression of time. Every language has lexical expressions of time, e.g. *yesterday*, *ten years before the foundation of Wolfson College*, or *in the year 2005*. Such lexical expressions may be fixed (*yesterday*) or may be formed productively (*ten years before the foundation of Wolfson College*). There is a potentially infinite number of the latter. That explains why lexical expressions are much more precise than tenses.

Since time can always be expressed lexically, there are languages without tense distinctions. One such language is Burmese (data from Comrie 1985: 50–1). Burmese has two modal particles which may appear to indicate tense:

(1) Da-caúñmoú mă-la-ta.
that-because.of not-come-REALIS
'Because of that he didn't come.'

(2) Măne?hpañ sá-me.
tomorrow begin-IRREALIS
'We will begin tomorrow.'

The realis suffix is only used for past or present events (you can never be certain about the future). This may look like a non-future tense. The irrealis suffix is mainly used for future events. The two suffixes are in complementary distribution. However, since the irrealis can actually be used for past events as well, it is better not to regard these suffixes as tense suffixes:

(3) Măcìthì sà-hpù-me htiñ-te
tamarind eat-ever-IRREALIS think-REALIS
'I think he must have eaten tamarinds before.'

The superordinate realis statement has present reference. The irrealis proposition has past reference.

Absolute tenses

Compare the following three sentences:

(4) Columbus discovered America in 1492.

(5) The child fell asleep some time ago.

(6) The child fell asleep two hours ago.

In 1492 is a very specific time adverbial and allows us to locate the event irrespective of the year we live in. There are no tenses corresponding to such time adverbials.

Some time ago refers to a moment anterior to the moment of speech. Tenses corresponding to such time adverbials are called absolute tenses.

Absolute tenses locate an event with reference to the moment of speech.

Two hours ago also situates an event with reference to the moment of speech, but gives a more precise degree of remoteness. Some languages have absolute tenses of this kind.

English has a complex tense and aspect system. Among its tenses there are absolute tenses:

(7) John went to school / is going / will go to school.

Went is an absolute past tense indicating that the action is anterior to the moment of speech. *Is going* marks simultaneity with the moment of speech. *Will go* marks posteriority to the moment of speech.

Some languages have absolute tenses, but not this threefold distinction between past, present and future. They simply mark past vs. non-past or future vs. non-future (Dyirbal). Past vs. non-past is what we find in the older stages of the Germanic languages. In German, future tense is not obligatory for future events and is often only used in order to disambiguate:

(8) Hans geht morgen zur Schule.
Hans goes tomorrow to-ART.FEM.DAT school
'Hans will go to school tomorrow.'

(9) Hans wird zur Schule gehen.
Hans becomes to-ART.FEM.DAT school go-INF
'Hans will go to school.'

In Ex. 8 the temporal adverbial *morgen* makes the time reference explicit, so the present tense can be used. In Ex. 9 futurity is made explicit by the future tense.

In other languages absolute tenses do not just indicate anteriority or posteriority to the moment of speech, but in addition the degree of remoteness from the moment of speech. Cf. the past tense suffixes of Yandruwandha, an Australian language (*h* behind a consonant indicates that it is dental; data from Comrie 1985: 98):

-na	very recent past
-nhana	within the last couple of days
-nhukarra	within the last few days
-nga	weeks or months ago
-lapurra	distant past

Yagua, a Peba-Yaguan language spoken mainly in Peru, also has a fivefold distinction for past tenses (data from Comrie 1985: 99):

-jásiy	within a few hours
-jáy	one day ago
-siy	within a few weeks
-tíy	within a few months
-jadá	distant or legendary past

Relative tenses

Compare again two English sentences:

(10) Jim walked in. John had arrived some time before.

(11) Jim walked in. John had arrived ten minutes before.

Some time before is an adverbial indicating anteriority to a reference point which is, in this example, not the moment of speech. *Ten minutes before* does the same, but in addition specifies the degree of remoteness more precisely. Some languages have tenses which indicate anteriority, simultaneity, or posteriority

with regard to a reference point and without marking absolute tense at all. English participial forms are in fact used for such relative tenses (anteriority, simultaneity):

(12) Having watched the movie, John ate a pizza.

(13) John will go to the cinema. Having watched a movie, he will eat a pizza.

(14) Reading your book, I couldn't help / can't help getting angry about your obscure style.

In Ex. 12 *having watched* is past because it is anterior to a past main clause verb. However, *having watched* does not have to be past. In Ex. 13 it is anterior, but future. *Reading* in Ex. 14 can be simultaneous with past or present events.

Are there languages which indicate the degree of remoteness to a reference point which is not the moment of speech? It seems that normally degrees of remoteness are measured with reference to the moment of speech, and this is also the case in Bamileke-Dschang (Grassfields Bantu, Cameroon); but in Bamileke-Dschang these tenses can also have a reference point different from the moment of speech (Comrie 1985: 85–6).

Finally, note that the English tenses cannot indicate remoteness in time, but just anteriority or posteriority to reference points. Out of context Ex. 15 may seem more remote than Ex. 16:

(15) John had opened the door.

(16) John opened the door.

But all that is indicated is that the opening event in Ex. 15 is anterior to a past reference point and that in Ex. 16 it is anterior to the moment of speech. Given suitable contexts, the pluperfect in Ex. 15 may refer to an event that is closer to the moment of speech than the simple past in Ex. 16:

(17) Mike came in a minute ago. John had opened the door a few minutes before.

(18) The door has been open since John opened it two years ago.

Absolute and relative tenses

It is not uncommon for languages to combine absolute and relative tenses. Latin has a very symmetrical system in the indicative:

	Past	Present	Future
Anterior	*dīx-eram* 'I had said'	*dīx-ī* 'I have said'	*dīx-erō* 'I shall have said'
Simultaneous	*dīc-ēbam* 'I was saying'	*dīc-ō* 'I am saying'	*dīc-am* 'I shall be saying / shall say'
Posterior	*dictūrus eram* 'I was going to say'	*dictūrus sum* 'I am going to say'	*dictūrus erō* 'I shall be going to say'

There seems to be some overlap. For instance, what is the difference between a present anterior (i.e. anterior to the moment of speech) and a past simultaneous tense? The present anterior tense is used for foreground information, while the past simultaneous tense is used for background information.

Atemporal presents?

In many languages the present is used for events that can be considered atemporal or perhaps omnitemporal:

(19) Westminster Abbey is in London.

This was true in the past and will be true in the future. In such cases the present is used because the situation is also true at the moment of speech and past and future can be regarded as extensions of the present.

Aspect

Aspect is a category that also has to do with time, but since aspect does not locate an event on the time axis, but rather describes situation-internal time, aspect is not deictic.

Perfective, imperfective, and related concepts

Perfective aspect describes an event as a complete whole, from the outside as it were. Imperfective aspect describes an event as incomplete and ongoing, from the inside as it were. This is the most important aspectual distinction in Slavonic languages and the contrast occurs in a variety of other languages as well. Compare Russian:

(20) On dolgo ugovarival menja, no ne ugovoril.
he long persuaded.IMPF me, but not persuaded.PERF
'He spent a long time trying to persuade me, but he didn't actually succeed in persuading me.'

The imperfective past *ugovarival* describes the event as ongoing and incomplete. Without the following clause it would be unclear if completion was ever reached. The following *ne ugovoril* presents the event of not persuading the speaker as a complete whole and leads to a conative interpretation of the first clause.

A similar contrast occurs in Ancient Greek:

(21) Ebasíleue déka étē.
reign-IMPF.3SG ten years
'He was reigning during ten years.'

(22) Ebasíleuse déka étē.
reign-AOR.3SG ten years
'He had a reign of ten years.'

Both events are over. The imperfect tense in Ex. 21 is used for imperfective aspect and presents the event as ongoing in the past. The aorist in Ex. 22 is the perfective equivalent and presents the event as a complete whole.

The English progressive and non-progressive may at first seem similar to the Slavonic imperfective and perfective:

(23) I was reading the newspaper when John burst in and interrupted me.

The progressive *reading the newspaper* is described as ongoing and incomplete; here the completion cannot take place because of the events described in the simple past. Despite such similarities, however, it is best not to equate the aspect systems. The English progressive is used in a subset of the situations in which the Russian imperfective would be appropriate; the progressive could be regarded as a special kind of imperfective. The imperfective is for example freely used with stative verbs such as verbs of knowing, while the progressive is excluded here:

(24) *John is knowing the answer.

(25) John is being polite.

Ex. 24 is simply ungrammatical. Ex. 25 turns a stative situation (*be polite*) in a temporary activity, and hence the progressive is allowed. Note also the following:

(26) John is knocking at the door.

Knock at the door is a momentaneous event, so how can it be described as ongoing? Progressive aspect combined with momentaneous events entails that the event is repeated (iterative interpretation).

Perfect

Not everything called perfect in the grammars of individual languages is a perfect in the aspectual sense. The Latin perfect, for example, is normally a perfective past rather than something denoting perfect aspect.

Perfect aspect is rather different from the aspects described above; it relates a state to a preceding situation. Whether the term 'aspect' is actually appropriate under these circumstances is open to debate.

The Greek perfect denotes perfect aspect:

(27) Tethnēke.
die-PERF.3SG
'He has died / is dead.'

What matters here is the present state. Because of the importance of such a present state, the (British) English perfect cannot be combined with an adverbial specifying past time:

(28) *John has watched the film ten years ago.

Note also the following:

(29) John has visited his grandmother this morning.

This implies that the morning is not yet over. Compare Ex. 30 with Ex. 31:

(30) *Einstein has visited Princeton.

(31) I have visited Princeton.

Einstein is subject and presumably topic. The sentence is about him. There can be no present relevance for him because he is dead. This explains why the sentence is ungrammatical. Ex. 30 is fine because the speaker is alive.

Tense and aspect

Present situations are normally ongoing, so present tense and imperfective aspect are a natural combination. Present tense and perfective or non-progressive are an odd combination and normally occur only when the description of the event takes as long as the event itself:

(32) Here comes Jones and scores a goal!

In most Slavonic languages the perfective has two tenses, past and non-past, with the non-past naturally receiving future interpretation. The imperfective also has past and non-past, but the non-past is present; in order to make future reference explicit, a special periphrastic construction is required.

Modality

Modality is concerned with the status of a proposition. Modality is a much wider field than tense or aspect and comprises phenomena like negation and presupposition. Negation changes the truth value of a proposition:

(33) John is clever.

(34) John is not clever.

Some languages have negative particles like English, while others have negative verbs which take infinitive complements.

If something is presupposed, it is taken for granted and is not subject to discussion:

(35) Mike claims that John got a job.

(36) It's a good thing that John got a job.

In Ex. 35, *John got a job* is asserted, but not presupposed. In Ex. 36, *John got a job* is presupposed. Compare what happens if you negate the superordinate verb:

(37) Mike doesn't claim that John got a job.

(38) It's not a good thing that John got a job.

Ex. 37 suggests that John didn't get a job. Ex. 38 makes it clear that John has a job now.

Today I am only talking about root modality, epistemic modality, and deontic modality.

Root modality concerns the relationship between a participant in an event and the event itself, e.g. is the participant able to bring the event about, is he willing to do so, etc.

Epistemic modality concerns possibility, impossibility, probability and the like.

Deontic modality concerns obligation, permission etc.

Root modality is normally expressed by lexical means. It matters in this connection because across languages it is common to find root modals developing into epistemic and deontic ones; cf. German

(39) Hans mag schwimmen.
Hans wants swim-INF
'Hans wants to swim.' (root modality, intention), or: 'Hans may be swimming.' (epistemic modality, possibility)

(40) Hans kann tanzen.
Hans can dance-INF
'Hans is able to dance.' (root modality, ability), or: 'Hans may dance.' (deontic modality, permission)

Often the same modal verbs are used for epistemic and deontic modalities:

(41) John may be at home now. (epistemic, possibility)

(42) You may go now. (deontic, permission / order)

Epistemic modality

Epistemic modality is concerned with the speaker's attitude to the truth-value of a proposition. I have already given English examples; in English the judgments concerning truth-values are presented without giving reasons for these judgments. In other languages reasons are presented, in which case we speak of evidential systems. Cf. Tuyuca from Brazil and Colombia (data from Palmer 2001: 36):

(43) díiga apé-wi
soccer play.3SG.PAST-VISUAL
'He played soccer.' (I saw it.)

(44) díiga apé-ti
soccer play.3SG.PAST-NONVISUAL
'He played soccer.' (I heard it, but didn't see it.)

(45) díiga apé-yi
soccer play.3SG.PAST-APP
'He played soccer.' (There is evidence like footprints.)

(46) díiga apé-yigi
soccer play.3SG.PAST-SEC
'He played soccer.' (Someone told me.)

(47) díiga apé-hĩyi
soccer play.3SG.PAST-ASSUM
'He played soccer.' (It's a reasonable assumption.)

Deontic modality

Deontic modality concerns propositions with a negative truth-value; deontic modality is about whether such propositions are allowed to take place or not. Many languages with simple mood systems express deontic and epistemic modality in the same way. Latin for example has indicatives for more factual propositions and subjunctives for those which might take place (epistemic possibility) or should take place (deontic obligation).

Many languages have separate forms for commands, called imperatives. Distinctions among various forms may concern politeness or time reference. Cf. Maidu (North California):

(48) Sólpi.
'Sing!'

(49) Mymýk púlkydi dákpajtipadà.
'Stick it in his door!'

Ex. 48 contains the 'imperative 1' used for an event to be carried out in the presence of the speaker. Ex. 49 contains the 'imperative 2' for an event to be carried out in the absence of the speaker.

A similar situation obtains in Cheyenne (Algonquian, Montana):

(50) Méseestse.
'Eat.'

(51) Mésėheo?o.
'Eat later.'

This pattern appears widespread among North American languages, but is not restricted to them. Cf. Latin:

(52) Abī.
'Go away.'

(53) Abītō.
'Go away later.'