

A Time-Relational Approach to Tense and Mood

1. Problem. It has long been observed that many languages with no verbal mood morphology use past tense morphology to convey irrealis, e.g. *I had a car* vs. *If I had a car I would give you a ride* (Dahl 1997; Palmer 2001). According to previous analyses, past and irrealis both express “remoteness” (Joos 1964; Langacker 1978; James 1982). However, this does not explain how the morpheme that conveys “remoteness in time” can convey “remoteness in reality”. Further, such analyses do not account for future tense morphology expressing irrealis. Focusing on Russian and Hebrew, I argue that the parallel should be drawn between Tense and Mood themselves and not between particular realizations of these categories. This analysis derives the crosslinguistic expression of irrealis by positing a single semantic feature for irrealis, past, and future.

2. Proposal. Tense and Mood are both treated as dyadic predicates that relate two times. I assume that Tense relates the utterance time T-Ut and the assertion time T-Ast (Klein 1995; Demirdache & Uribe-Etxebarria 2000). I propose that Mood relates the evaluation time (time relative to which the utterance is evaluated as true or false; T-Evl) and T-Ut. The relation between two times is characterized as the single opposition of (non-)coincidence: Tense expresses (non-)coincidence of T-Ut and T-Ast, while Mood expresses (non-)coincidence of T-Evl and T-Ut. To capture these similarities and differences, I propose that Tense and Mood have the same semantic feature [\pm COIN] but distinct morphosyntactic features, [\pm PAST] and [\pm FIN], respectively. The interaction between the two types of features together with the mechanism of feature agreement results in the interpretation of [$-$ COIN] as both past and irrealis.

3. Analysis. In present tense T-Ut and T-Ast coincide: the assertion is made about an event that occurs at T-Ut. In past/future tense they do not coincide: the assertion is made about an event that precedes/follows T-Ut. In realis T-Evl and T-Ut coincide: the evaluation time is the utterance time, i.e. the utterance is evaluated as true or false relative to the utterance time. In irrealis T-Evl and T-Ut do not coincide: the evaluation time is not the utterance time because the utterance cannot be evaluated as true or false relative to the utterance time. Features [\pm PAST] and [\pm FIN] license a relation of (non-)coincidence by valuing [COIN] on T and C as follows:

Head	Morphosyntactic feature	Semantic feature	Interpretation
C	[+FIN]	[+COIN]	realis
		[$-$ COIN]	irrealis
	[$-$ FIN]	[$-$ COIN]	irrealis
T	[+PAST]	[$-$ COIN]	past
	[$-$ PAST]	[$-$ COIN]	future
		[+COIN]	present

Since finite clauses can be realis (indicatives) or irrealis (e.g. subjunctives), [+FIN] is too general to value [COIN]. Therefore, [COIN] receives its value via agreement with [COIN] on T—the closest valued instance of the same feature within its c-command domain (Pesetsky & Torrego 2004). First, [+PAST] directly values [COIN] on T. Then [$-$ COIN] on T values [COIN] on C via feature agreement. Consequently, past tense is re-interpreted as irrealis, as shown in (1). Under this analysis, [$-$ COIN] on T can also be interpreted as future. The prediction is that irrealis can also be conveyed by future tense morphology, but not by present tense morphology. This prediction is borne out for Russian and Hebrew:

Language	Tense morphology	Morphology used to express irrealis
Russian (as in 2)	Past vs. non-past	Past tense morphology
Hebrew (as in 3-4)	Past, future, present	Past and future tense morphology

4. Implications. There is a correlation between the morphological contrast within the tense system on the one hand and the grammatical expression of irrealis on the other. If this analysis is correct, the prediction is that languages with no verbal mood morphology and with the future/non-future tense system should use future tense morphology to convey irrealis. A preliminary examination suggests that Hopi may be such a language: it has future/non-future tense system (*-ni* ‘future’ vs. zero morpheme for non-future), with the future suffix also used to convey irrealis (Malotki 1983).

5. Conclusion. The main innovation of this analysis is a unified treatment of Tense and Mood as dyadic predicates each of which relates two times. The examination of cross-linguistic data reveals a correlation between the morphological distinction in the domain of Tense and the expression of Mood. The analysis derives the expression of irrealis crosslinguistically: it correctly predicts that both past and future tense morphology can convey irrealis, and that the choice is determined by the morphology of the tense system.

- (1) a. [TP [T_[+PAST] -->[-COIN]]...
- b. [CP [C_[+FIN] />[-COIN]] [TP [T_[+PAST] -->[-COIN]]...

- Russian (Tense morphology: Past/Non-Past)

- (2) a. Vasja **čita-l** knigu včera /*sejčas/*zavtra. *Indicative Mood,*
 Vasja **read-PAST** book yesterday /now /tomorrow *Past Tense*
 ‘Vasja read / was reading a book yesterday /*now /*tomorrow.’
- b. Daša xotela, čtoby Vasja **čita-l** knigu včera /sejčas / zavtra. *Subjunctive Mood,*
 Dasha wanted COMP_{SUBJ} Vasja **read-PAST** book yesterday / now/ tomorrow *No Tense*
 ‘Dasha wanted Vasja to read a book yesterday / now / tomorrow.’

- Hebrew (Tense morphology: Past, Present, Future)

- (3) a. **haiti** be-America šana še-avra / #axšav / *šana ha-baa. *Indicative Mood,*
be.PAST in-America year last / now / year next *Past Tense*
 ‘I was in America last year / #now / *next year.’
- b. ilu **haiti** Rothschild (axšav) **haiti** gar be-America (axšav). *Conditional Mood,*
 if **be.PAST** Rothschild now **be.PAST** live in-America now *No Tense*
 ‘If I were Rothschild (now), I would live in America (now).’
- (4) a. Dani **j-aase** uga maxar /*etmol / #axšav. *Indicative Mood,*
 Dani **FUT-make** cake tomorrow/ yesterday / now *Future Tense*
 ‘Dani will make a cake tomorrow/yesterday/#now.’
- b. Gila racta [še Dani **j-aase** uga etmol / ha-jom / maxar]. *Subjunctive Mood,*
 Gila wanted that Dani **FUT.make** cake yesterday/ today / tomorrow *No Tense*
 ‘Gila wanted Dani to make a cake yesterday/today/tomorrow.’

6. References.

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