

# On mapping the modality of conditional sentences

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- ❖ *If*s: so easy to use, so hard to explain
- ❖ One old problem, one new (old) solution
- ❖ One ancient language illuminating one (or more) modern
- ❖ In support of 'irrealis'

## 1 Introduction

1. If it rains tomorrow, I'll take an umbrella.
2. If I won the lottery, I'd go abroad.

### 1.1 Terminology

- \* 'Real' vs 'Unreal'
- \* 'Open' vs 'Hypothetical'
- \* 'Indicative' vs 'Subjunctive'
- \* 'Indicative' vs 'Counterfactual'
- \* **Type a** and **Type b** ✓

### 1.2 A modal difference

- \* In Latin, the two types are marked by change of mood:

3. Si hoc faciet [INDIC], beatus ero [INDIC]

4. Si hoc faciat [SUBJ], beatus sim [SUBJ]

- \* Even in languages where moods are not used, the term 'modal' is found in descriptions

(*e.g. Huddleston & Pullum 2002*).

### 1.3 Meaning

- \* Widely agreed
- \* Depend on strength of speaker's belief in proposition

Type a:	protasis may or may not happen
Type b:	speaker indicates doubt about the likelihood of protasis

☞ Conditional modality is epistemic?

### 1.4 Epistemic modality: a definition

- \* "Speakers express their judgments about the factual status of the proposition"  
(Palmer, 2000)
- \* Recognised as fundamental in early studies of modality  
(Lyons, 1977; Palmer, 1986).
- \* Category unusually stable in many systems  
(van der Auwera & Plungian, 1998; de Haan, 2006)
- \* Various different exponents are distinguished:
  5. It may rain tomorrow ('I'm not sure')
  6. I might come to the party ('It's a possibility')
  7. Rebecca must have arrived by now ('I'm sure')
- \* Parallel with conditional sentences seems strong

### 1.5 Previous approaches

- \* Jespersen 1924, 320-1: "contains no element of will" = epistemic.
- \* Givón 1994, 289: conditionals lie on an "epistemic scale".
- \* Palmer 1986, 212: "tends to be *sui generis* - the use of forms is not directly related to the use of other types of clauses at least in IE languages".
- \* Jespersen later: his categorisation is "open to doubt" (Palmer, 1986).

## 2 Problems with the traditional approach

- \* Modal verbs not used for this modality in English
- \* Locus for this modality is problematic

### 2.1 No consistent form in protasis

1a. If it rained yesterday, they got wet.	1b. If I had known that, I would have told you.
2a. If it's Wednesday, I am in Beijing.	2b. If she were Plato, she would be explaining better.
3a. If it rains, I will take an umbrella.	3b. If I won the lottery, I would go abroad.

### 2.2 Modal forms in the apodosis

8. εἰ πράσσοι τοῦτο, καλῶς ἂν ἔχοι  
if do.OPT.3.SG that.ACC, well {MP} hold.OPT.3.SG  
'if he were to do that, it would turn out well'
9. French: Il vous **appellerait** s'il savait que vous l'aimez.
10. Italian: **Mangerei** ora se avessi tempo.
11. English: If I had seen him, I **would have** hit him

### 2.3 No modal form marking type in protasis

12. εἰ ἐπραξε τοῦτο, ...  
if do.AOR.INDIC.3.SG that.ACC, ...  
'if he did that, then ...' OR 'if he had done that, then ...'

### 2.4 Philosophers

13. If Oswald didn't kill Kennedy, someone else did.
14. If O hadn't killed Kennedy, someone else would have.

(See e.g. Edgington 1995; Adams 1970; Lewis 1973)

### 3 New approach

<b>1a.</b> If it rained yesterday, they got wet.	<b>1b.</b> If I had known that, I would have told you.
<b>2a.</b> If it's Wednesday, I am in Beijing.	<b>2b.</b> If she were Plato, she would be explaining better.
<b>3a.</b> If it rains, I will take an umbrella.	<b>3b.</b> If I won the lottery, I would go abroad.

<b>1a.</b> εἰ ἔπραξε τοῦτο, καλῶς ἔχει. εἰ + aorist, indicative	<b>1b.</b> εἰ ἔπραξε τοῦτο, καλῶς ἂν ἔσχεν. εἰ + aorist, aorist + ἂν
<b>2a.</b> εἰ πράσσει τοῦτο, καλῶς ἔχει, εἰ + present, indicative	<b>2b.</b> εἰ ἔπρασσε τοῦτο, καλῶς ἂν εἶθεν εἰ + imperfect, imperfect + ἂν
<b>3a.</b> ἐὰν πράσσει τοῦτο, καλῶς ἔξει ἐὰν + subjunctive, future indic.	<b>3b.</b> εἰ πράσσοι τοῦτο, καλῶς ἂν ἔχοι εἰ + optative, optative + ἂν

**Type a:** a statement is made about the world

**Type b:** no statement is made

\* Matches conclusions of philosophers well

 Conditional modality is not epistemic

#### 3.1 Irrealis modality: a definition

- \* Often used in the description of 'exotic' languages
- \* Irrealis "portrays situations as purely within the realm of thought, knowable only through imagination" (Mithun, 1999, 173).

### 3.2 Irrealis: the controversy

- \* Less well mapped than logical moods (e.g. van der A and P 1998)
- \* A cover term: irrealis sentences are propositions which are “weakly asserted as either possible, likely or uncertain . . . , or necessary, desired or undesired” (Givón, 1994, 268).
- \* Bybee et al: in their survey of 76 languages they did not find any “in which a single gram could adequately be described as marking off all this irrealis territory” (Bybee *et al.*, 1994, 238).

☞ ‘Irrealis’ in conditional clauses is more specific definition.

### 3.3 The modality of the protasis

- \* Meaning of protasis is well explained in the new approach

Type a:	modifications of statements rather likely
Type b:	modifications of hypotheses less likely

- \* Grammatical marking of the protasis also explicable

### 3.4 Nature of conditional clauses

	p	q	$p \supset q$
i	T	T	T
ii	F	T	T
iii	F	F	T
iv	T	F	F

### 3.5 Greek and English marking in the protasis

	type a	type b
1.	indicative	back-shift
	indicative	indicative
2.	indicative	back-shift
	indicative	indicative
3.	back-shift	back-shift
	modal particle	optative

### 3.6 Changes over time

\* Subjunctive in **2a** in Early Modern English:

15. If music be the food of love, play on (Shakespeare, I, 1, 2)

\* Optative in **1b** and **2b** in Homer

*(Horrocks, 1995)*

\* 36/294 **3a** protases in Homer have no modal particle

*(Willmott, 2007)*

### 3.7 Suggested tendencies for marking in the protasis

	a	b
1.		
2.		
3.		

## 4 Conclusions

- ❖ Modal forms better explained if apodosis is locus for modality
- ❖ An example of 'irrealis' modality in English
- ❖ Grammtical form of the protasis complicated by environment

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