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# **On Hindi Conditionals**

*Ghanshyam Sharma*

*In logic it is commonly believed that a conditional sentence is an aggregate of two propositions, namely the antecedent  $p$  and the consequent  $q$ , combined together exactly in the same manner as in the case of conjunction and disjunction. From our analysis of Hindi data, it emerges that the antecedent, or protasis, is not a real proposition, but rather a propositional function and thus carries a speaker's split modal meaning. In addition, this paper claims that the notion of 'conditional clause inversion' should be looked at from the pragmatic point of view. Hindi data suggest that it is not the protasis which moves rightward as a result of speaker's 'after-thought', but rather the proposition employed in apodosis which is dislocated leftward for different pragmatic reasons, leaving the apodosis marker in its canonical place. If this hypothesis proves to be true in other languages as well, then it can be safely concluded that the clause order universal ( $p \rightarrow q$ ) remains unaltered in all languages. Such a hypothesis may also controvert the thesis according to which protases are adverbial clauses and may serve to advance the idea that conditionals are one of many other topics where pragmatic intrusion into syntax can be easily attested.*

## **1. Introduction**

The present study primarily aims at classifying different varieties of Hindi conditionals, looking at underlying principles which are responsible for the selection of a particular tense-aspect-mood element (TAM hereafter) rather than others for employment in one of the two propositions that make up a conditional statement. The paper takes a pragmatic approach to conditionals to characterize an arranged distribution of TAM elements among different classes of Hindi conditionals. As a consequence, it does not aim at presenting any truth-functional account of Hindi conditionals, nor does it intend to dredge up any older versions of philosophical theories of conditionals in general, in order to initiate a theoretical debate. However, any discussion on the pragmatic principles underlying a TAM element selection

in two propositions in a conditional statement will inevitably be drawn into, or in passing refer to, some earlier philosophical discussion as well. Where necessary, we will not desist from making passing remarks about syntactic analyses in the field, although this is not the goal of the paper. The paper asserts that various linguistic theories of conditionals which strive to analyze and establish the distribution of TAM elements in the protasis<sup>1</sup> (i.e. the ‘*if*-clause’ or the ‘antecedent’) and the apodosis (i.e. the ‘*then*-clause’ or the ‘consequent’) are inadequate in that, contrary to widely held belief in most of the philosophical discussion on conditionals, the two propositions which make up a conditional are not of the same semantical value. As will become clear from the discussion in the following sections, the proposition employed in protasis is essentially a propositional function (and thus with a speaker’s split modal meaning!) rather than a real proposition, and is thus prone to take different values, some of which are true and some false. As a consequence, while it is useful to look at both the protasis and the apodosis from the point of view of ‘time of reference’ —as it helps to establish the time to which a conditional statement as a whole pertains or refers— it is nevertheless not a reliable method considering them exclusively in terms of tenses marked within them. The term *if* employed to introduce a protasis into a conditional construction divides the whole semantical world into two parts: one in which the state of affairs described in protasis is to be true, and the second in which it is to be false. The speaker does not attach a modal meaning to the protasis in the same way as he does to the apodosis. In making a conditional statement, he seems to adhere to an inherent logical disjunction in the protasis. For example, the circumstances in which an indicative conditional ‘ $P \rightarrow Q$ ’<sup>2</sup> (e.g. ‘If today is Sunday, the priest will be in church’)<sup>3</sup> could be asserted are the following: ‘Either  $\neg P$  or  $P$  and  $Q$ ’ (i.e., Either today is not Sunday or, it is Sunday and the priest is in church).<sup>4</sup> Therefore, it is inappropriate to consider a hidden subordinate indicative proposition encountered in a protasis such as ‘If John lives in Venice...’ equal to an independent indicative proposition such as ‘John lives in Venice’. In the first case, the speaker does not commit himself to the veracity of the state of affairs described therein, nor is he in a position to take any illocutionary stand thereon. That is so because the speaker neither knows nor believes whether or not John lives in Venice. He simply considers the truth-value of the proposition ‘John lives in Venice’ as a possible case for the apodosis to be true, and does not express his opinion about the case in which  $P$  is to be false. In the second case, on the other hand, for all the speaker knows, the proposition ‘John lives in Venice’ is to be necessarily true (or, to put it in a logical notation,  $K \Box P$ ). That

is to say, according to the speaker, John necessarily belongs to the class of those people who live in Venice. Failure to realize this fundamental difference between two propositions —i.e. ‘If John lives in Venice, ...’ and ‘John lives in Venice’— has led to some major misunderstandings in many spheres of both philosophy and linguistics. The paper argues that for a deeper understanding of conditional constructions it is crucial to maintain the fundamental distinction between the semantical values of protasis and apodosis and the modal meanings therein.

## 2. Relationship between material implication and conditional

Natural language conditionals have for millennia been viewed in relation to ‘material implication’<sup>5</sup> —the orthodox term in the field of logic and philosophy—and considered to have exactly the same logical structure of the latter. However, we believe that for different pragmatic reasons natural languages do not allow for certain inferences to take place in everyday communication even if they seem otherwise quite congruous in the case of ‘material implication’.<sup>6</sup> One of the most striking features of a conditional utterance (or statement) is that, although at first glance it appears to be consisting of two propositions, the first P and the second Q, it is not a semantical aggregate of the two —many suggestions to this effect from ancient philosophy notwithstanding. As has been widely reported, according to ancient Greek philosophy ‘implication’ is a relationship between two propositions, wholly analogous to ‘conjunction’ and ‘disjunction’, as can be demonstrated in table 1.

*Table 1.* The following truth-table shows the way in which a comparison was envisaged in the ancient Greek philosophy between conjunction, disjunction and conditional (or what has come to be known as ‘material implication’ in logic after Russell), all having two propositions, namely P and Q, and two values: T (true) and F (false).

			Conjunction	Disjunction	Implication
	P	Q	P and Q	P or Q	P implies Q
(1)	T	T	T	T	T
(2)	T	F	F	T	F
(3)	F	T	F	T	T
(4)	F	F	F	F	T

Thus, according to logicians, material implication is an aggregate of two propositions in a similar way as conjunction and disjunction. As can be

easily illustrated through the ‘truth table’ presented in table 1, if P is true (say, ‘Paris is in France’) and Q is true as well (say, ‘Rome is in Italy’), then the conjunction ‘P and Q’ and the disjunction ‘P or Q’ will be true, as will be the material implication ‘P implies Q’. The second row has P true (say, ‘Paris is in France’), but Q false (say, ‘London is in Italy’). Thus, the disjunction is true but both the conjunction and the material implication false. In the third row, P is false (say, ‘Paris is in England’) and Q true (say, ‘Rome is in Italy’). Apparently, the conjunction is false but disjunction and the material implication true. In the fourth row in the diagram, both P (say, Paris is in England) and Q (say, London is in France) are false. Consequently, both the conjunction and the disjunction are obviously false, but the implication turns out to be strikingly true. On this account, the material implication, to which conditionals have been linked in logic, is false only when P is true but Q false. In all other circumstances it turns out to be surprisingly true. Needless to say, natural languages tend not to accept the validity of a conditional construction which has a false antecedent but a true consequent. So, why is it that in logic a conditional can be true even when it has a false antecedent and a true consequent? It has been argued that “the material implication interpretation of the conditional, assigning ‘true’ to a conditional with a false antecedent, was justified by denying that universally quantified sentences have existential presuppositions, i.e. admitting an empty set to be the interpretation of the antecedent A and adhering to bivalence.” (Traugott et al. 1986: 15) In simple terms, although the proposition reported in a protasis can have both ‘true’ and ‘false’ values, the relation between the protasis and the apodosis should hold even if the proposition introduced in the protasis turns out to have a ‘false’ value, for it is only the ‘true’ value of the proposition in the protasis which is the requirement for the apodosis to be true. Thus, a protasis having a proposition with a false value does not cause (or require) the apodosis to have the same false value. In other words, a conditional statement does not provide any logical grounds to exclude the truthfulness of the apodosis in case where the proposition of the protasis should turn out to be false. However, as mentioned above, natural languages tend to not interpret conditionals in this way. As has been widely reported, in natural language communication, speakers generally associate the false value of the protasis with a false value of the apodosis. For example a sentence such as (1) ‘If John comes tomorrow, Mary would be happy’ is generally taken to implicate that: ‘If John does not come tomorrow, Mary would not be happy.’ Obviously, this implicature can be cancelled by adding to the sentence ‘But she would be happy anyway.’ A conditional utterance, therefore, requires a pragmatic

interpretation and cannot be studied solely as an aggregate of the truth-conditions of two propositions since they have different semantical values as well as roles in a conditional utterance.

### 3. Classification of Hindi conditionals according to time reference

In this section we present a tentative classification of Hindi conditionals according to the point in time a conditional statement as a whole refers to. Or, to put it in simple terms, the point in time the utterer of a conditional statement has in mind. Thus, the point in time of a conditional may or may not correspond to the time expressed in either the protasis or the apodosis, although, as indicated above, the tenses in the apodosis have to be taken into consideration.<sup>7</sup> The tenses marked in the protasis merely indicate the degrees of hypotheticality which serve to lay the ground for the apodosis to be true. Since the time reference of a conditional does not necessarily correspond to the overt tenses in the clauses of a conditional statement, it is necessary to maintain a distinction between the time reference of a conditional and the tenses encountered in the protasis and apodosis. In what follows, we will try to discuss and classify some types of conditionals only according to the point in time they refer to. Thus, we will not be concerned with an overall survey of Hindi conditionals.

#### 3.1. Conditionals with present time reference

##### 3.1.1. Habitual aspect in both the protasis and the apodosis

A Hindi conditional statement with present time reference may exhibit a habitual aspect in both protasis and apodosis, as in (1) and (2). In such cases, the conditional statement gets an ‘every-time-events’ rather than a ‘particular-time-single-event’ interpretation and thus the two propositions which constitute such a conditional statement can also be rendered by a non-conditional statement which has a universal time quantifier, namely ‘Whenever...’, without bringing any significant changes to the meaning.<sup>8</sup>

- (1) *agar<sup>9</sup> bāriś hotī hai to ḫagan mē kīcar ho jātā hai*  
if rain-F<sup>10</sup> be-IMPFV.F AUX-PRES.3SG then courtyard in  
mud-M become-IMPFV.M.SG AUX-PRES.3SG  
'If it rains, then there is mud in the courtyard.'

- (2) *agar vo mujhe bulātī hai to mai*  
 if she I-ACC invite-IMPFV.F AUX-PRES.3SG then I  
*uske ghar calājātā hū*  
 her house go-IMPFV.M AUX-PRES.1SG  
 ‘If she invites me, I go to her house.’

As said above, conditionals in (1) and (2) have an every-time-events reading, namely ‘Whenever it rains there is mud in the courtyard’ and ‘Whenever she invites me, I go to her place’, respectively. In Hindi these propositions can be linked together by a time adverb and rendered through a relative-correlative Hindi construction ‘jab-jab... tab...’ (whenever...), etc.<sup>11</sup> Thus, a conditional statement having the habitual aspect in both the protasis and the apodosis carry zero hypotheticality. Similarly, when a protasis in habitual aspect is followed by an apodosis having aspects other than the habitual, it introduces a meaning similar to ‘Given that...’, ‘If it is the case/fact that...’, etc.

### 3.1.2. Protasis containing aspects other than habitual

Any aspectual change in the verb with a present time reference necessarily brings about changes in the degree of hypotheticality in the entire conditional statement. Accordingly, unlike the habitual aspect, the progressive and perfective aspects, respectively in the protasis of (3) and (4), make these statements single-event-conditionals rather than all-time-events conditionals.

- (3) *agar bāriś ho rahī hai to bāhar kīcar hogā*  
 if rain-F be-PROG.F AUX-PRES then outside  
 mud-M be-PRESM.M.3SG  
 ‘If it is raining, then there must be mud outside.’
- (4) *agar rāt-ko bāriś hui hai to bāhar kīcar hogā*  
 if night-during rain-F be-PFV.F AUX-PRES.SG then  
 outside mud-M be-PRESM.M.3SG  
 ‘If it has rained during the night, then there must be mud outside.’

As illustrated above, conditionals in (1) and (2) have an all-time reference whereas in (3) and (4) they have a single-event present time reference. The future form of the verb *honā*, ‘to be’, in the apodosis in (3) and (4) ex-

presses a presumptive modality on the part of the speaker rather than a future tense.<sup>12</sup> Thus, whether a conditional statement having a present time reference gets an all-time or a single-event interpretation depends on the type of verbal aspect of the protasis. In addition to the presumptive modality, some other TAM elements, including the future tense, can be attested in the apodosis. However, all such conditionals carry a zero hypotheticality and have present time reference.

### 3.2. Conditionals with future time reference

#### 3.2.1. Conditionals expressing possibility

Hindi conditionals with future time reference are those statements in which the action reported in the apodosis has to take place at a time later than the time of utterance. The proposition reported in the protasis can exhibit either future tense, as in (5), subjunctive mood, as in (6) and (7), or perfective aspect, as in (8), forms of the verb.

- (5) *agar vo bulāegā to mai̤ uske ghar jāūgā*  
if he invite-FUT.M.3SG then I her house go-FUT.M.1SG  
'If he invites me, I will go to his house.'
- (6) *agar vo bulāe to mai̤ uske ghar jāū*  
if he invite-SUBJ.3SG then I her house go-SUB.1SG  
'If he invites/ Should he invite me, I will/would go to his house.'
- (7) *agar vo bulāe to mai̤ uske ghar jāūgā*  
if he invite-SUBJ.3SG then I his house go-FUT.M.1SG  
'If he invites/ Should he invite me, I will go to his house.'
- (8) *agar usne mujhe bulāyā to mai̤ uske ghar jāūgā*  
if he-ERG I-ACC invite-PFV.3SG then I his house go-FUT.M.1SG  
'If he invited me, I would go to his house.'

As stated in previous sections, the protasis prepares the ground for the apodosis to be true. The protasis may or may not contain a clear indication of time in it. However, the tense morphology once employed in the protasis loses its general meaning and gets a conditional interpretation. Thus the tenses encountered in protasis do not carry a speaker's modal meaning. They should not be confused with the tenses attested in independent propositions.

### 3.2.2. Conditionals expressing impossibility – counterfactuals with future time reference

As we shall see in the next section, Hindi conditionals having imperfective morphology in both the protasis and apodosis generally refer to an event which was scheduled to take place at a point in time prior to the utterance time. Thus, the imperfective participles in both the protasis and apodosis are generally thought to be synonymous with counterfactuals which refer to past unrealized events. However, the same counterfactual conditional with imperfective morphology can also be employed to refer to those ‘impossible’ actions which would have taken place at a point in time later than utterance time had the condition envisaged in the protasis been met. But, since according to the speaker the conditions described in the protasis are not to be met for various reasons, he can make a counterfactual statement which refers to a future event, as in (9a) and (9b). In this sense, such a usage of the counterfactual conditional with a future time reference is totally analogous to the counterfactual with a past time reference—the only difference being that the counterfactual with past time reference is impossible for temporal reasons, the counterfactuals with future reference are viewed as impossible by the speaker on grounds other than that of time. In both cases, however, the impossibility of the propositions in protasis and apodosis is presupposed and is based on the piece of knowledge the speaker has about the event reported in the protasis.

- (9) a. *agar vo mujhe agle hafte-kī pārṭī-mē*  
     if    he I-ACC next week-of party-in  
     *bulātā to maī us-mē zarūr*  
     invite-IMPFV.M.SG then I     that-in certainly  
     *śāmil hotā*  
     participate-IMPFV.M.SG  
     ‘If he had invited me to the next week’s party, I would certainly have participated in it.’
- b. *agar usne mujhe agle hafte-kī pārṭī-mē*  
     if    he-ERG I-ACC next week-of party-in  
     *bulāyā hotā to maī us-mē*  
     invite-PFV.M.SG AUX- IMPFV.M.SG then I     that-in  
     *zarūr śāmil hua hotā*  
     certainly participate-PFV.M.SG AUX-IMPFV.M.SG  
     ‘If she had invited me to the next week’s party, I would certainly have participated in it.’

### 3.3. Conditionals with past time reference

#### 3.3.1. Habitual aspect in both the protasis and the apodosis

As in the conditionals with present time reference, the habitual aspect can be employed in conditional statements with past reference to obtain zero hypotheticality. Such conditionals thus get an ‘all-time-events’ rather than a ‘single-time-event’ interpretation. For instance, the examples illustrated above in (1) and (2) in the context of present time reference can be made to have a past time reference by changing the auxiliary, as in (10) and (11):

- (10) *agar bāriś hotī thī to ūgan-mē*  
if rain-F be-IMPFV.F AUX-PST.F then courtyard-in  
*kīcar ho jātā thā*  
mud-M become-IMPFV.M.SG AUX-PST.M.3SG  
‘If it rained (in those days), then there was mud in the courtyard.’
- (11) *agar vo mujhe bulātī thī to maī*  
if she I-ACC invite-IMPFV.F AUX-PST.F.SG then I  
*uske ghar calā jātā thā*  
her house go-IMPFV.M AUX-PST.SG  
‘If she invited me (in those days), I would go to her house.’

Apparently, as (1) and (2) get an all-time interpretation in the present, so do (10) and (11) in the past, and similarly can be rendered by a ‘Whenev-er...’ construction. Thus, these conditionals carry a zero hypotheticality in the past. As illustrated above, Hindi conditionals with a habitual aspect in both the protasis and the apodosis consist of an imperfective participle and an auxiliary. However, in the narration of past events, it is quite common to encounter habitual past sentences without an auxiliary.<sup>13</sup> For example, in (12) both the protasis and apodosis are introduced without an auxiliary and thus do not have a tense marker. Such examples, however, indicate a habitual aspect and get from the context the past time reference rather than a counterfactual interpretation.

- (12) *bacpan-mē agar koi ham-ko paise detā*  
childhood-in if someone we-DAT money give-IMPFV.M.SG  
*to ham roz bājār jāte*  
then we everyday market go-IMPFV.M.PL  
‘In our childhood, If someone gave/ were to give us money, we would (= used to) go to the market everyday.’

### 3.3.2. Protasis containing aspects other than habitual

Hindi conditionals with past reference can have the protasis in aspects other than the habitual. For example, (13) and (14) have progressive and perfective aspects in the protasis respectively, and the apodosis carries the speaker's presumptive modal meaning:

- (13) *agar us vaqt bāriś ho rahī thī to bāhar*  
if that time rain-F be-PROG.F AUX-PST.F.SG then outside  
*kīcar ho gayā hogā*  
mud-M become-PFV.M AUX-PRSUM.M.SG  
'If it was raining that time, then it must have been muddy outside.'
- (14) *agar us rāt bāriś hui thī to bāhar*  
if that night rain-F be-PFV.F AUX.PST.F.SG then outside  
*kīcar ho gayā hogā*  
mud-M become-PFV.M.SG AUX-PRESM.M.3SG  
'If it had rained that night, then it must have been muddy outside.'

### 3.3.3. Imperfective participle in both the protasis and the apodosis: counterfactuals

As indicated above, Hindi does not possess any separate verb forms that could be compared with conditional verb forms<sup>14</sup> such as those attested in many Romance languages. However, it has at its disposal other morphological devices to mark the counterfactuality. The perfective-imperfective aspectual divide throughout the TAM system is one of them. In fact, Hindi makes use of this distinction in different syntactic contexts, including conditional clauses. Thus, Hindi conditionals with past time reference are those counterfactuals which exhibit imperfective verb forms both in the protasis and the apodosis simply to mark the non-completion of actions or events reported in the two propositions that constitute a conditional.

- (15) *agar us-ne mujhe bulāyā hotā to*  
if she-ERG I-ACC invite-PFV.M.SG AUX-IMPFV.M.SG then  
*maī kal uske ghar gayā hotā*  
I yesterday her house go-PFV.M.SG AUX-IMPFV.M.SG  
'If she had invited me, I would have gone to her house yesterday.'

- (16) *agar vo mujhe bulātī to mai kal uske ghar calā jātā*  
 if she I-ACC invite-IMPFV.F.SG then I yesterday  
*her house go-IMPFV.M.SG*  
 'If she had invited me, I would have gone to her house yesterday.'

#### 4. Types of Hindi conditionals according to modal meaning they carry

In this section, we make an attempt to classify Hindi conditionals according to the modal meaning they carry. By modal meaning we mean that semantic element which is to be attached by the utterer either overtly or covertly to every proposition in order for it to carry the meaning that it does in a natural communication setting.<sup>15</sup> From this standpoint, many categories based on various illocutionary forces can be envisaged: epistemic conditionals and deontic conditionals, commissive conditionals, etc.

##### 4.1. Epistemic conditionals

Epistemic conditionals are those types of statements which have apodosis with a speaker's epistemic modal meaning. Present habitual, future, subjunctive, perfective participle, imperfective participle and a perfective participle followed by the imperfective participle can appear in the protasis of an epistemic conditional. The following examples show the increasing hypotheticality of Hindi conditionals. Thus, (17) convey zero hypotheticality whereas (22) carries the highest degree of hypotheticality:

- (17) *agar chātr mehnat karte hāī*  
 if students exertion-F do-IMPFV.M.3PL AUX-PRS.3PL  
*to safal hote hāī*  
 then successful be-IMPFV.M.3PL AUX-IMPFV.M.3PL  
 'If students work hard, they (generally) succeed.'
- (18) *agar vah mehnat karegā to safal hogā*  
 if he exertion-F do-FUT.M.3SG then successful  
 be.FUT.M.3SG  
 'If he works hard, he will succeed.'

- (19) *agar vah mehnat kare to safal ho*  
 if he exertion-F do-SUBJ.3SG then successful be-SUBJ.3SG  
 'If he works/ Should he work hard, he will succeed.'
- (20) *agar usne mehnat kī to safal hogā*  
 if he-ERG exertion-F do-PFV.F.3SG then successful  
 be-FUT.M.2PL  
 'If he worked hard, he would succeed.'
- (21) *agar vah mehnat kartā to safal hotā*  
 if he exertion-F do-IMPFV.M.3SG then successful  
 be-IMPFV.M.SG  
 'If he had worked hard he would have succeeded.'
- (22) *agar usne mehnat kī hotī to safal huā hotā*  
 if he-ERG exertion-F do-PFV.F.SG AUX-IMPFV.F.SG  
 then successful be-PFV.M.SG AUX-IMPFV.M.SG  
 'If he had worked hard he would have succeeded.'

#### 4.2. Deontic conditionals

This class consist of those conditional statements in which the apodosis carries a speaker's deontic modal meaning. Hindi deontic conditionals can display all degrees of hypotheticality except the counterfactuality in protases and all kind of deontic devices in apodoses, as illustrated in the following examples:

- (23) *agar usne bulāyā hai to uske ghar jāo*  
 if she-ERG invite-PFV.SG AUX-PRS.SG then her  
 house go-IMP.2PL  
 'If she has invited you, go to her house.'
- (24) *agar vo bulāe to uske ghar jāo*  
 if she invite-SUBJ.3SG then her house go-IMP.2PL  
 'If she invites, then go to her house.'

In the case of the highest degree of hypotheticality, deontic modality cannot be attached through an imperative to the apodosis since the protasis

carries a counterfactual meaning. However, in such cases deontic wishes instead of an imperative can be employed , as in (25).

- (25) *agar vo bulātī to tum-ko uske ghar jānā cāhie thā*  
 if she invite-IMPFV.F then you-DAT her house go-INF  
*must AUX-PST.M.SG*  
 ‘Had she invited, you must have gone to her house.’

#### 4.3. Commissive conditionals

In this class of conditional, the speaker’s commitment to the hearer is expressed in the apodosis. Almost all the varieties of conditional can express a speaker’s commitment. (26), (27) and (28) are all examples of realis conditionals.

- (26) *agar vah bhārat āegā to mai̤ use tājmahal dikhāūgā*  
 if you India-F come-FUT.M.2PL then I he-DAT  
 Tajmahal show-FUT.M.1SG  
 ‘If he comes to India I will show him the Tajmahal.’
- (27) *agar vah bhārat āe to mai̤ use tājmahal dikhāūgā*  
 if you India.F come-SUBJ.3SG then I he-DAT  
 Tajmahal show-FUT.M.1SG  
 ‘If he comes/ Should he come to India, I will show you the Tajma-  
 hal.’
- (28) *agar vah bhārat āyā to mai̤ use tājmahal dikhāūgā*  
 if you India-M come-FUT.M.PL then I he-DAT  
 Tajmahal show-FUT.M.1SG  
 ‘If he came to India I would show him the Tajmahal.’

From the point of view of an inherent epistemic modal meaning, protases may convey speaker’s belief only (i.e. Speaker believes but does not know that P). Hence the protasis is introduced into a conditional statement through ‘if’ marker. Protases cannot introduce speaker’s knowledge (i.e. Speaker knows that P) into a conditional, although, in the case of counterfactuals, speaker’s ‘knowledge that P’ plays an important role. In fact, in

counterfactuals the protasis is grounded on the contrary knowledge or belief of the speaker. In addition to the knowledge of belief element, protasis may also convey volitional meanings of the speaker through a subjunctive. However, protases do not carry presumptive modal meanings (i.e. Speaker knows that necessarily P). Furthermore, protases do not carry deontic modal meanings.

## 5. Overt marking of conditionality in Hindi

For the most part, both the protasis and apodosis are marked overtly in Hindi. However, the overt markers of protasis and apodosis (namely *agar/yadi..., to...*)<sup>16</sup> show a pattern which is to a great extent different from the one attested in English. In fact, unlike English and many other European languages, Hindi requires the apodosis to be obligatorily marked by the marker *to*, as being part of a conditional when it follows a protasis—irrespective of whether the protasis is marked or not—as can be seen from a comparison of (29a) and (29b) with (29c) and (29d). The absence of the apodosis marker *to* makes (29c) semantically odd,<sup>17</sup> and leaves (29d) a mere sequence of two propositions rather than a de facto conditional statement.<sup>18</sup> The apodosis in Hindi may be unmarked only in particular spoken forms where it has to precede the protasis, as can be seen in (30b).<sup>19</sup> Even in such cases, though, the marker of the apodosis may show up in its canonical place, after the protasis, as is evident in (30c). Such an appearance of the apodosis marker at the end of a conditional statement indisputably proves the obligatory nature of apodosis marking in Hindi. The protasis, on the other hand, is not marked obligatorily.<sup>20</sup> In effect, while it is necessary in Hindi for the apodosis to be marked, it is not obligatory for the protasis to be marked overtly, at least in a canonical conditional statement—i.e., when protasis precedes the apodosis—as is apparent in (29b). That said, the protasis is to be marked obligatorily should it be preceded by the apodosis, as can be seen from the ungrammaticality of (30a), (30d) and (30e).

- (29) a. *agar Rām āyā, to maī us-se pūchūgā*  
          if     Ram come-PFV.M.SG   then I he-ABL ask-FUT.M.1SG  
      b. — *Rām āyā, to maī us-se pūchūgā*  
          — Ram come-PFV.M.SG   then I he-ABL ask-FUT.M.1SG

- c. ?*agar Rām āyā*, — *maī us-se pūchūgā*  
     if     Ram come-PFV.M.SG — I he-ABL ask-FUT.M.1SG  
 d. \*— *Rām āyā*, — *maī us-se pūchūgā*  
     — Ram come-PFV.M.SG, — I he-ABL ask-FUT.M.1SG  
     ‘If Ram comes/came, I will/would ask him.’
- (30) a. \**to maī Rām-se pūchūgā agar vo āyā*  
       then I Ram-ABL ask-FUT.M.1SG if he come-PFV.M.SG  
 b. ?— *maī Rām-se pūchūgā agar vo āyā*  
       — I Ram-ABL ask-FUT.M.1SG if he come-PFV.M.SG  
 c. *maī Rām-se pūchūgā agar vo āyā to*  
       I Ram-ABL ask-FUT.M.1SG if he come-PFV.M.SG then  
 d. *to maī Rām-se pūchūgā — vo āyā*  
       then I Ram-ABL ask-FUT.M.1SG — he come-PFV.M.SG  
 e. \*— *maī Rām-se pūchūgā — vo āyā*  
       — I Ram-ABL ask-FUT.M.1SG — he come-PFV.M.SG  
     ‘I will/would ask Ram if he comes/ came.’

To recapitulate the above discussion, then, the characteristic features of conditionality markers in Hindi can be presented as in table 2.

Table 2. The distribution of overt markers of conditionality in Hindi between protasis and apodosis. The dash (—) indicates absence of the marker.

Protasis	Apodosis	
(1) [ <i>agar-P</i> → <i>to-Q</i> ]		a well-formed Hindi conditional
(2) [ — -P → <i>to-Q</i> ]		a well-formed Hindi conditional
(3) ?[ <i>agar-P</i> → —Q ]		a not-well-formed Hindi conditional
(4) *[ — -P → —Q ]		an ill-formed Hindi conditional
Apodosis	Protasis	
(5) *[ <i>to -Q</i> ← <i>agar-P</i> ]		an ill-formed Hindi conditional
(6) *[ — -Q ← <i>agar-P</i> ]		a not-well-formed Hindi conditional
(7) [ — -Q → <i>agar-P...to</i> ]		a well-formed Hindi conditional
(8) *[ <i>to -Q</i> ← — -P ]		an ill-formed Hindi conditional
(9) *[ — -Q ← — -P ]		an ill-formed Hindi conditional

As can be seen from table 2, in Hindi the apodosis is obligatorily marked whereas the protasis marker can be dropped. An unmarked apodosis renders a conditional statement unacceptable. Even in the cases where an inversion between the protasis and the apodosis is to take place, the apodosis marker is seen in its canonical place.

## **6. The order of protasis and apodosis in Hindi conditional statements**

In his pursuit of universals derived from generalizations about human languages, Greenberg (1963: 84-85) made an important claim about clause ordering in conditionals saying that: “Universal of Word Order 14: In conditional statements, the conditional clause precedes the conclusion as the normal order in all languages”. According to his observation, this linguistic universal is due to iconicity which has the sequential order principle at its heart. He attempted to establish that the sequential order of events is mirrored in a conditional statement. In other words, the clause ordering in a *If P then Q* construction exactly maps the parallels between the order of elements in language and the order of elements in experience, including the order of reasoning.<sup>21</sup> According to various truth-functional accounts of conditionals, this ordering can be explained away in the sense that the ‘implied facts’ reported in the apodosis—whether from a real or similar-to-real world—are to be true only in a possible world in which the ‘implying facts’ described in the protasis are to be true. Thus, it is not only logical but also obligatory to introduce the ‘implying elements’ reported in the protasis before the ‘implied elements’ described in the apodosis. This linguistic universal about ordering of clauses in a conditional statement, that is *If P then Q*, is fully supported by the data from Hindi, as it requires the finite verb of the main clause to stand in sentence-final position, thus requiring the apodosis to be placed after the protasis. There are some other promising proposals about the canonical protasis-apodosis ordering which all go in the direction of sustaining the above-mentioned linguistic universal.<sup>22</sup> In a nutshell, temporal reference theory suggests that the protasis-apodosis order reflects the temporal reference of two clauses,<sup>23</sup> the cause and effect theory claims that the observed linear order reflects the cause and effect relation between the two clauses.<sup>24</sup> According to another proposal, the protasis has to come first because it prepares common ground for the communicability of the apodosis.<sup>25</sup> As reported by Haiman, protases are topics and thus tend to occur sentence-initially.<sup>26</sup> Though not in total agreement with the above-mentioned proposals and various analyses, the present paper considers the suggestion put forward by various truth-functional theories to be reasonably convincing: the antecedent (i.e. protasis) has to come first in view of the fact that in a conditional statement it introduces the state of affairs of a possible world which serves as the basis for constructing a world in which the state of affairs described in the consequent will take place. Recall our previous discussion about the nature of the two propositions in a conditional statement. We noticed that, although

both the protasis and the apodosis are bivalent propositions (i.e. they can be either true or false), in a conditional statement, the truthfulness of an apodosis is viewed in relation to the truthfulness of the protasis, not the other way around. A conditional statement is false only when the protasis is true and the apodosis false. A true protasis requires the apodosis to be true as well, in order to make the conditional statement true. Furthermore, if the protasis is to be false, then the apodosis may be either true or false, without affecting the truthfulness of a conditional statement as a whole. The conditional statement will nonetheless remain true. In other words, to see whether a conditional statement is true or false depends on the truthfulness of the apodosis in relation to the truthfulness of the protasis. Hence, the universality of *if*-protasis → *then*-apodosis order.

Despite this quasi unanimous, albeit variegated, consensus among different schools of thought about this linguistic universal, none of the suggestions put forward by scholars about ‘conditional clause inversion’ (i.e. from protasis-apodosis to apodosis-protasis) seems to be satisfactorily convincing. For example, a protasis encountered after the apodosis in a conditional statement has been generally considered to be a result of ‘conditional clause inversion’ which supposedly takes place simply due to an after-thought of the speaker. Without undertaking the task of presenting any detailed syntactic analysis of apodosis-protasis ordering in Hindi, we nonetheless intend to advance a completely different hypothesis in this direction. Our data suggest that the phenomenon of supposed ‘conditional clause inversion’ is conceived improperly, at least in the case of Hindi. We argue that the ‘conditional clause inversion’ should be viewed not as a rightward movement of the entire conditional clause (i.e. protasis)—as has been assumed by different syntactic analyses—but rather as a leftward dislocation of factual elements described in the apodosis which takes place owing to preposing (or fronting) and some other pragmatic principals. If we are prepared to look at the so-called phenomenon of inversion of clauses in conditional statements from a different point of view, we will notice that the universal order *If P then Q* does not undergo any major alterations. Consequently, we believe that the canonical protasis-apodosis ordering of clauses in conditionals, as shown in (31a), is indeed a linguistic universal, and it is not the protasis which moves rightward, as is seen at a surface level in almost all natural languages. Accordingly, the phenomenon of ‘conditional clause inversion’ in conditional statements should look as in (31b), not as in (31c), contrary to widely held belief.

- (31) a. [*if*-protasis proposition → *then*-apodosis proposition]  
       b. [apodosis proposition [*if*-protasis proposition → *then*- —]]  
       c. [*then*-apodosis proposition → *if*-protasis proposition]

We argue that for any Hindi conditional construction to be acceptable, it is necessary to keep rigidly to the ‘if-then’ order, even in those cases where the apodosis proposition has to move leftward for any pragmatic reasons. In fact, in Hindi even in cases where the apodosis proposition is dislocated to the left, the apodosis marker remains in its canonical place, as illustrated in (32a). Dislocating the entire apodosis with its marker renders the conditional construction totally ungrammatical in Hindi, as demonstrated in (32c) and (32d). The absence of an apodosis marker, as in (32b), cannot be considered a counterexample to the rigid rule of apodosis marking, as spoken Hindi does allow for the marker to be dropped, but only if the protasis is marked.

- (32) a. *maĩ Rām-se pūchūgā agar vo āyā to*  
       I Ram-ABLask-FUT.M.1SG if he come-PFV.M.SG then  
       b. ?— *maĩ Rām-se pūchūgā agar vo āyā*  
       — I Ram-ABL ask-FUT.M.1SG if he come-PFV.M.SG  
       c. \**to maĩ Rām-se pūchūgā agar vo āyā*  
       then I Ram-ABL ask-FUT.M.1SG if he come-PFV.M.SG  
       d. \**to maĩ Rām-se pūchūgā — vo āyā*  
       then I Ram-ABL ask-FUT.M.1SG — he come-PFV.M.SG  
       e. \*— *maĩ Rām-se pūchūgā — vo āyā*  
       — I Ram-ABL ask-FUT.M.1SG — he come-PFV.M.SG  
       ‘I will/would ask Ram, if he comes/ came.’

In order to check our claim, we have tried to see the data situation of protasis and apodosis across some world languages, relying exclusively on some typological studies.<sup>27</sup> Data from over 50 language suggest that it is not the protasis that moves rightward, but rather the propositional elements of the apodosis are preposed. In fact, none of the languages described in three typological studies provides ascertainable proofs of the rightward movement of the protasis in a conditional statement.

## 7. The relationship between the *if*-clause and the *then*-clause in Hindi

In previous sections we have argued that Hindi data confirm the hypothesis formulated by Greenberg in his Universal of Word Order 14, according to which the *if*-clause is to precede the *then*-clause. We have, furthermore, advocated that it is inappropriate to assume that there is a rightward dislocation of the *if*-clause in a Hindi conditional statement. As a consequence, we have advanced a hypothesis that in Hindi it is the proposition introduced by a *then*-marker which is preposed by the speaker in order to achieve different pragmatic goals, leaving the *then*-marker in its canonical position, as demonstrated in (33).

- (33) [apodosis proposition [*agar*-protasis proposition → *to*- —]]

At this point it becomes necessary to see what kind of relation holds between the protasis and the apodosis. In particular, it would be interesting to see how the *if*-clause is attached to the *then*-clause. In a succinct survey of distinct syntactic theories of conditionals, Bhatt and Pancheva (2004) classify and critically examine diverse proposals put forward in this direction. As reported by the authors, in traditional grammars the two clauses are coordinated syntactically through *if* conjunction. Thus, according to traditional grammarians, the *if*-clause is equivalent to an adverbial clause. This view is further supported by many syntacticians on the grounds that VP ellipsis phenomena in conditionals goes against the hypothesis that conditionals are merely coordinated constructions. Hence conditional clauses (i.e. protases) are nothing but adverbial clauses.<sup>28</sup> Without undertaking any detailed syntactic analysis of the *if*-clause in Hindi, we consider this idea somewhat superficial in that any adverbial complementizer can be deleted without bringing much syntactic change into a sentence whereas an *if*-clause cannot, at least not semantically. Even in the cases of reduced conditionals in Hindi where only the *then*-clause can be attested in a natural discourse, the presence of an *if*-clause is presupposed. According to another proposal, conditionals are similar to correlative constructions. In the case of Hindi, we find the idea proposed by Dayal (1996) quite convincing. Schlenker (2001) has put forth a new idea for the semantic treatment of conditionals, arguing that protases are definite plural descriptions and thus subject to Condition C of the Binding Theory. However, despite numerous attempts made by diverse schools of thought, the syntax of conditional sentences remains a challenging topic. The fact that none of the theories put forward by scholars can indisputably claim to provide solutions for the

complexity of the syntax of conditionals is yet another proof of the peculiarity of conditional reasoning. We believe that the *if*-clause is the foundation of a conditional statement as a whole and cannot be considered a mere complementizer. The two propositions employed in a conditional statement are intrinsically linked and are interdependent: none can exist without the either overt or covert (for example, in the case of reduced conditionals) presence of the other. In a conditional statement (for example, ‘If John lives in Venice, he lives in Italy’), the truth of ‘P implies Q’ remains true due to some other argument (that is, living in Venice necessarily implies living in Italy), irrespective of whether P is true or false and whether Q is true or false. In other words, the above conditional remain true even if John does not live in Venice.

## 8. Pragmatic intrusion on the structure of a conditional statement

As mentioned in previous sections, the canonical structure of a conditional, namely  $P \rightarrow Q$ , has to sustain various types of pragmatic intrusions. This happens partly because of the inherent logical structure of a conditional statement but also because of its discourse boundedness. The underlying logical structure of a conditional,  $\neg P \vee P$  and  $Q$  (i.e. ‘Either not-P or P and Q’) induces a conditional statement to pragmatically implicate  $\Diamond \neg P$ , and thus an epistemic scenario of a conditional statement becomes as follows:

$$(34) \quad K_s \Diamond P \vee \Diamond \neg P \text{ and } \Diamond Q \vee \Diamond \neg Q$$

i.e., for all the speaker knows it either is or is not Sunday and, thus, possibly it is the case that the priest is in church or possibly it is the case that the priest is not in church.<sup>29</sup> It has been widely argued that natural languages impose restriction on this epistemic scenario by excluding  $\neg P$  and  $Q$  (i.e. It is not Sunday and the priest is in church). In fact, due to a pragmatic intrusion on conditional statements (34) takes the form of (35):

$$(35) \quad B_s P \text{ (i.e. } P \equiv \neg \neg P) \rightarrow Q$$

In other words, for all the speaker believes, it is Sunday (i.e. it is not the case that not-Sunday) and the priest is in church. This epistemic scenario may undergo further restrictions as soon as P is employed in a conditional statement. Thus, what syntactic form a conditional statement is going to take in real speech depends exclusively on the context in which it is to be

made. For example, if both the speaker and the hearer mutually share a piece of knowledge, namely ‘It is Sunday’, then a conditional statement in this circumstance would most likely take the following form: ‘Since/Given that it is Sunday the priest will be in church’. If, on the other hand, the speaker is not sure whether it is Sunday or not, then what he asks the hearer to find out whether it is in effect a Sunday. It is also possible that this piece of information is provided by the hearer and the speaker neither knows nor believes it and thus merely affirms the proposition in the apodosis. In a nutshell, then, the overall structure of a conditional statement is determined by the contextually-given knowledge and beliefs of both the hearer and the speaker. Similarly, a protasis is always discourse bound and can take different degrees of hypotheticality according to the context. Conditionals do not make sense without their discourse context.<sup>30</sup> In the context of pragmatic intrusion, we can also take into consideration the topic of reduced conditionals. We argue that the form of reduced conditionals depends exclusively on the shared knowledge between the speaker and the hearer. The speaker selects the reduced conditional if the elliptical elements are already part of the shared knowledge between the speaker and the hearer.

## 9. Conclusion

At the outset of the present paper, we began by analyzing and discussing different varieties of Hindi conditionals according to the distribution of TAM elements in the protasis and the apodosis. All along our discussion, we have maintained a clear distinction between protasis and apodosis. We have tried to show that the TAM elements attested in the protasis are hypothetical and not real. They serve merely to prepare the ground on which the apodosis has to be true. We have made a brief attempt to identify those underlying pragmatic principles which are responsible for the leftward movement of the proposition in the apodosis. From our analysis of Hindi data, it emerges that the *if*-clause found after the apodosis at the surface level of a conditional does not violate the linguistic universal according to which a conditional construction should follow protasis-apodosis order. We have argued that in Hindi it is not the protasis which moves rightward but rather the propositional elements of the apodosis that are preposed by the speaker in order to accomplish some pragmatic goals, leaving the apodosis marker in its place. Thus, we have tried to advance the rigid ‘proto-

sis-apodosis' order hypothesis which, if supported by the data from other languages, may initiate a new way of looking at pragmatic intrusion into the syntax of the if-clause which has so far received a different treatment in various syntactic analyses. Furthermore, it has been argued that, contrary to the widely held belief in the domain of logic, conditionals are not a semantical aggregate of two propositions and that the protasis and the apodosis are not of the same nature.

## Notes

1. In order to draw the line between a conditional statement and other types of statements consisting of two propositions, we shall be using throughout the paper the term pair *protasis-apodosis* introduced by traditional grammarians to name the two clauses, being quite aware of the much wider acceptability of the pair *antecedent-consequent*, notably in philosophical tradition. We believe that conditionals are completely different from, and should not be confused with, other types of statements which are made of two propositions. Some other names given to the *if*-clause and the *then*-clause are also misleading. For example, the team of researcher under the editorship of Xrakovskij (2005) have used the terms 'dependent clause' (DC) for the *if*-clause and 'main clause' (MC) for the *then*-clause. We would argue that if clause is not a dependent clause at all. On the contrary, the *then*-clause seems to be dependent on the *if*-clause which is the basis of a conditional statement.
2. In order not to confuse the reader with different types of notations, we are using the material conditional notation ' $P \rightarrow Q$ ' without making any difference between this notation and others such as 'If A, B', 'If A, C' 'If A then C' or 'If..., then...', etc.
3. Example borrowed from Comrie (1986: 78).
4. For a detailed discussion on the topic, see for example Jackson (1991: 111).
5. The term 'material implication' is known also as 'material conditional' or 'truth-functional conditional' and represented through different notations or symbols in philosophical literature.
6. If we follow the way in which material implication was conceived by Greek Philosophers, we find a proposition such as "If moon is made of chocolate (F), then it is made of cheese (F) and that it is made of volcanic rock (T)" congruous since material implication allows a false antecedent to be the basis of either false or true apodosis. Obviously, that natural language communication does not allow such inferences to take place. We believe that even the introduction of 'relevant logic' to get rid of such anomalous inferences does not solve the problem.

7. In an ambitious attempt to bring out typological characterizations of conditional constructions across world languages, a team of linguists at St. Petersburg University has come up with various generalizations about conditionals constructions in 24 languages. (Xrakovskij 2005) Though admirable, any such endeavour is bound to mix up things because it is impossible to be consistent throughout in the use of terminology due in part to the divergent linguistic traditions of each language, and in part also to different backgrounds of the authors. The distribution of TAM elements between the protasis and apodosis across different languages, for example, has been classified and explained using different terminologies. This has led to some inaccuracy in the analysis of a number of languages.
8. Thus, in reference grammars of various languages this type of conditional is generally dubbed ‘zero-conditional’, since the conditionals of this category contain a zero degree of hypotheticality.
9. For some technical reasons, a mixed-type of transliteration system (which is popular among scholars working on Indian languages) rather than IPA dia-critic is adopted in this paper.
10. Abbreviations: 1 = first person, 2 = second person, 3 = third person, AUX = auxiliary, ABL = ablative, IMPFV = imperfective, FUT = future, PFV = perfective, PST = past, CONT = continuous, PRES = present, PRESM = presumptive, SUBJ = subjunctive, CFV = counterfactual (contrafactive), SG = singular, PL = plural, M = masculine, F = feminine, OBL = oblique, ACC = accusative, HON = honorific, PASS = passive, IMP = imperative.
11. For example, (1) and (2) can be rendered through a relative-correlative Hindi construction in the following examples:
 

*jab-jab bāriś hotī hai to āgan-mē*  
 whenever rain-F be-IMPFV.F AUX-PRES.3SG then courtyard-in  
*kīcar ho jātā hai*  
 mud-M become-IMPFV.M.SG AUX-PRES.3SG  
 ‘Whenever it rains, there is mud in the courtyard.’

*jab vo mujhe bulātī hai to mai*  
 when she I-ACC invite-IMPFV.F AUX-PRES.3SG then I  
*uske ghar calā jātā hū*  
 her house go-IMPFV.M AUX-PRES.1SG  
 ‘When she invites me, I go to her house.’
12. We have discussed this elsewhere: (Sharma 2008).
13. See McGregor (1995: 187) and Montaut (2004: 240–242) for further details.
14. Some authors maintain that the Hindi imperfective participle is counterfactual. See, for example, Oranskaya (2005: 235). However, we believe that it would not be appropriate to link the Hindi imperfective participle with any particular category as it is used throughout the Hindi tense-aspect system (for example in habitual present, habitual past) as well as to construct adjectival and adverbial complementizers. We argue that Hindi conditionals make use of the perfec-

tive-imperfective divide to indicate various degrees of hypotheticality. Thus, the imperfective participle in Hindi is employed in both the protasis and the apodosis of counterfactuals to indicate that none of the actions reported in the protasis and the apodosis were accomplished.

15. We have discussed this in detail in Sharma 2000 and Sharma 2008.
16. In addition to ‘agar’ and ‘yadi’, some other forms are also attested to mark the protasis: *jo* (a relative pronoun), *kahī* (if ever, in case, etc.), *kāś* (mostly in counterfactuals), *kadācit* (if ever; in Sanskritized Hindi). For further details see Oranskaya (2005: 222).
17. It must be admitted though that, as a new trend —due in part to an inevitable influence of English on Hindi— some speakers tend not to mark the apodosis always, particularly in spoken Hindi. However, the standard written register of Hindi requires of the apodosis to be marked obligatorily, irrespective of whether the protasis is marked or unmarked.
18. We do not consider such a sequence of propositions a conditional statement. However, we will not go here into the question of why and when a sentence sequence such as *You don’t want to go to the market? I will* or *Open the window and I will kill you* or *Rām āyā. māī us-se pūchūgā* (i.e. Ram came. I will ask him) in a particular context can have a conditional tone in normal speech.
19. Even in these cases, the acceptability of unmarked apodosis is highly controversial among speakers of Hindi. We will return to the question of ‘conditional clause inversion’ in the next section where we advance the hypothesis that in reality there is no such thing as ‘inversion of protasis-apodosis order’ in Hindi conditional statements, but rather a displacement of the apodosis clause furthest to the left, leaving the marker of apodosis at its canonical place and thus maintaining the protasis-apodosis order intact.
20. Thus, the claim made by Comrie (1986: 96) stating that “Although it is possible to have conditionals where neither protasis nor apodosis is explicitly marked as being part of a conditional, it is usual for the protasis to be overtly marked; marking of the apodosis is less common, and marking of the apodosis alone is particularly rare.” does not seem to be totally correct. In Hindi the apodosis is marked obligatorily, regardless of its position in the conditional (i.e., either before or after the protasis), and irrespective of whether the protasis is marked overtly or not.
21. For a succinct discussion of the universalistic approach to conditionals, see Overview by Charles A. Ferguson et al. in *On Conditionals*, Traugott et al. (eds.), 1986, 8-10.
22. For a summary of other proposal see Comrie (1986: 83-86).
23. Like Comrie (1986: 85), we do not consider this hypothesis to be valid. However, we believe that the counter-example discussed by him: “If it will amuse you, I’ll tell you a joke” is inappropriate. The will modal employed in protasis in this example provides no time reference but the speaker’s modal meaning.

24. Like Comrie we do not support this hypothesis. For a summary of other proposal, see Comrie (1986: 83-86).
25. Lehman, Christian (1974) quoted by Comrie (1986: 86).
26. “A conditional clause is (perhaps only hypothetically) a part of the knowledge shared by the speaker and his listener. As such, it constitutes the framework which has been selected for the following discourse.” (Haiman 1978: 583)  
“The topic represents the entity whose existence is agreed upon by the speaker and his audience. As such, it constitute the framework which has been selected for the following discourse.” (Haiman 1978: 585).
27. Our observation is based exclusively on the following three works: (1) *Typology of Conditional Constructions*, Victor S. Xrakovskij (ed.), (2005) for Bulgarian (Rousselina Nicolova), Armenian (Natalia A. Kozintseva), Dari (Boris Ya. Ostrovsky), Greek (Tatayana I. Oranskaya), Early Latin (Margarita K. Sabaneyeva), French (Elena E. Kordi), German (Svetlana M. Kibardina), English (Tatiana G. Akimova, Natalia A. Kozintseva), Finnish (Hannu Tommola), Estonian (Irina P. Külmoja), Hungarian (László Jaszai, Ethelka Tóth), Hausa (Myrrah A. Smirnova, Nikolaj A. Dobronravin), Klamath (Viktor A. Stegniy), Indonesian (Alexander K. Ogloblin), Cambodian (Natalia M. Spatari), Vietnamese (Igor S. Bystrov, Nonna V. Stankevič), Chinese (Tamara N. Nikitina), Even (Andrej L. Malchukov), Evenki (Igor V. Nedjalkov, Nina Ya. Bulatova), Eskimo (Nikolaj B. Vaxtin), Aleut (Evgeniy V. Golovko), Yukaghir languages (Elena S. Maslova) and Japanese (Vladimir M. Alpatov, Vera I. Podlesskaya); (2) *The semantics of Clause Linking*, R. M. W. Dixon, and Alexandra Y. Aikhenvald (eds.), (2009) for Akkadian, Galo, Khan, Manambu, Iquito, Aguaruna, Ojibwe, Fijian, Toqabaqita, Martuthunira, Korean, Goemai, Konso and Mali; (3) *The Indo-Aryan Languages*, Colin P. Masica, (1991) for various Indo-Aryan languages. None of the languages discussed in above mentioned works seem to have ‘apodosis-protasis’ ordering.
28. For a critical assessment of diverse syntactic theories (i.e. conditional-correlative link theory, conditional-interrogative link theory, etc.) see Bhatt and Pancheva (2004).
29. We would like to clarify Levinson’s point (2000: 109) where he illustrates the scenario of clausal implicature employing epistemic modifier K (knowledge) rather than B (belief). Although one can know that it is either P or  $\neg P$ , as soon as this piece of knowledge becomes part of a protasis, it takes the form of B (belief). The protasis, we claim, always carries speaker’s belief rather than knowledge. A piece of knowledge in the protasis would be tantamount to “Given that...”, “Since/as...” rather than to “If...”. For further discussion on the topic of implicature, see also Fauconnier (1985: 109).
30. See Akatsuka (1986: 349) for further details.

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