

A Classification of Conditionalsⁱ

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Introduction

In reasoning and conversation, we frequently make good use of expressions such as: ‘If I send him flowers, he’ll think I’m desperate’; ‘It will take you too long to get there if you choose the scenic route’; ‘If he really wanted to marry me, he would have asked me when we were in Paris’; ‘If you had been there, you’d understand what I’m talking about’, and; ‘If I turn left on the next corner, I will see the cinema next to the bank’. We will here use the term ‘conditionals’ for all such statements.¹ In our everyday life, we use and understand such conditionals with ease and competence, and rarely do we misunderstand what is meant or implied by them. However, in the philosophical debate on conditionals and their logical properties, there are disagreements about what they really express. Much of this debate is a matter of how and whether conditionals can be represented in a formal logical system, a debate that to a large extent is influenced by the material conditional approach to natural conditionals.²

It is not the purpose of this paper to discuss, or implicitly or explicitly criticize, particular positions in the existing debate on conditionals. Since we consider this debate to be based mainly on shared insufficient premises, regardless of the attitude towards the material conditional interpretation of natural conditionals, an alternative perspective on conditionals seems called for. To present such a perspective is the focal point of this paper. Moreover, since the material conditional interpretation constitutes the implicit or explicit starting point for almost any discussion on conditionals, whether it is advocated, defended, modified, circumscribed or criticized, we will relate our approach here to the supposed

¹ There are several other ways to express a conditional relation, for instance: ‘B if A’, ‘B given A’, ‘provided that A, then B’, ‘A is a sufficient condition for B’, ‘assuming that A, then B’, ‘B is a necessary condition for A’, ‘supposing that A, then B’, ‘provided that A, then B’, ‘A only if B’, ‘B unless A’, and so on. All such statements will be included in our term ‘conditionals’. To distinguish between the ordinary language conditional expressions and the material conditional interpretation of them, however, we will refer to the former as ‘natural conditionals’, marked as ‘If A then B’, and the latter as ‘material conditionals’, marked as ‘ $A \supset B$ ’.

² This tendency is for instance apparent in the two anthologies *Conditionals* (Jackson ed. 1991) and in *Ifs* (Harper et. al. eds. 1981), where we find works of for instance Adams, Edgington, Gibbard, Goodman, Grice, Harper, Jackson, Lewis and Stalnaker.

view that at least some natural conditionals can be adequately interpreted as material, or at least as something very similar to a material conditional.³

1. The material conditional interpretation of ‘If A then B’

According to a material conditional interpretation, natural conditionals have the following truth functional truth conditions: A conditional is true whenever we have one of the following combinations of truth-values for the antecedent ‘A’ and the consequent ‘B’: (TT), (FT) or (FF). Hence, a conditional is defined as false only when we have the combination (TF). There are however some well-known problems with the material interpretation of conditionals. Since the material conditional ‘ $A \supset B$ ’ is defined merely as a function of the truth-values of its components, it cannot involve the most essential property of a natural conditional, namely the dependence relation between the state of affairs described by ‘A’ and ‘B’ that the conditional itself seems to express. Rather than merely indicating certain possible combinations of truth-values for its components, a natural conditional can be said to be true or false with the following combinations of truth-values for its’ components:

- i) A natural conditional can be true when the antecedent and the consequent are both true, as in ‘If Socrates is a man, then he is mortal’, or it can be false under these circumstances, as in ‘If Socrates is mortal, then he is a man’.
- ii) A natural conditional is false whenever the antecedent is true and the consequent is false, as in ‘If Socrates is a man, then he is a cat’.
- iii) A natural conditional can be true when the antecedent is false and the consequent is true, as in ‘If Socrates is a cat, then he is mortal’, or it can be false under these circumstances, as in ‘If Socrates is a stone, then he is mortal’.
- iv) A natural conditional can be true when the antecedent and the consequent are both false, as in ‘If Socrates is a stone, then he is inanimate’, or it can be false under these circumstances, as in ‘If Socrates is inanimate, then he is a stone’.⁴

³ An account of natural conditionals can be said to be “similar” to a material conditional account in several ways. For instance, this is the case when one makes a conditional a function of its antecedent and consequent, such that the truth, assertability or probability of the conditional can be calculated from the truth, assertability or probability of the antecedent and the consequent. Another account that is similar to the material account is to assume that for instance indicative but not subjunctive or counterfactual conditionals are adequately interpreted as material conditionals. Besides, the same can be said about an account where one treats conditionals according to calculable assertion conditions that replace or supplement the truth conditions of the material conditional, in which case the assertion conditions’ main task is to avoid that the antecedent has a higher degree of assertability or probability than the consequent. Cf. the various works featuring in (Jackson ed. 1991) and (Harper et al. eds. 1981).

⁴ This line of thought is taken from Garland, a medieval logician. Boh (1993), pp. 4-5.

Accordingly, the truth conditions of natural conditionals do not seem to coincide with the truth conditions of the material conditional, except for cases where both the natural and the material conditional are false, namely when the antecedent is true and the consequent is false. One major difference between the material conditional and natural conditionals is that the former is true whenever it is not the case that the antecedent is true and the consequent is false, while the latter will be considered false under other circumstances as well. This means that whenever a natural conditional 'If A then B' is true, the corresponding material conditional ' $A \supset B$ ' is true as well; however, the material conditional will not necessarily be false whenever the natural conditional is false, since the natural conditional intuitively can be false within all combinations of truth-values for antecedent and consequent, and not only when the antecedent is true and the consequent is false.

According to the material conditional interpretation of natural conditionals, then, all natural conditionals are supposed to be true under the following circumstances, and thus have the following logical properties, in sharp contrast to what seems intuitively to be the case:

- i) Whenever both the antecedent 'A' and the consequent 'B' are true. From this it follows that any pair of true sentences 'A' and 'B' will form a true natural conditional 'If A then B', which means that the inference from 'A and B' to 'If A then B' and 'If B then A' is valid. In natural language, however, we cannot from the truth of 'David Hume wrote *Treatise*' and 'Murder is illegal' infer that it is true that 'If David Hume wrote *Treatise*, then murder is illegal' and 'If murder is illegal, David Hume wrote *Treatise*'.
- ii) Whenever the antecedent 'A' is false. From this it follows that the inference from 'not-A' to 'If A then B' is valid. However, the natural conditional 'If stones dissolve in water, then one cannot use a stone to break a window' is not true on the supposition that its antecedent is false.
- iii) Whenever the consequent 'B' is true. From this it follows that the inference from 'B' to 'If A then B' is valid. However, in natural language, the conditional 'If all people stop eating meat, then McDonald's opens new restaurants every year' is not true on the supposition that its consequent is true.

From i), ii) and iii) it seems clear that the material conditional can hardly be said to be an accurate interpretation of how we use the conditional expression 'If A then B', not even with respect to its truth conditions.

1.1 Indicative and counterfactual conditionals

The problems inherent to the material conditional interpretation of 'If A then B' resulted in many attempts to find alternative approaches to conditionals. In these alternatives, the distinction between indicative and counterfactual and/or subjunctive conditionals is often used as a key to differentiate between conditionals with different logical properties. The assigned importance of this distinction was initially motivated by Adams' recognition of the difference in truth conditions for the following pair of conditionals:

1. If Oswald didn't kill Kennedy, then someone else did it.
2. If Oswald hadn't killed Kennedy, then someone else would have.

A conditional of the first type is classified as indicative and a conditional of the second type as counterfactual (or subjunctive). This distinction is usually given a central role in the alternative approaches to a material conditional interpretation of natural conditionals. However, a problem with many of the alternatives is that they seem, in one way or another, to incorporate a modified version of the material conditional.⁵

In the debate on conditionals, then, counterfactual conditionals are usually regarded as the stumbling block of the material conditional representation of natural conditionals: that a conditional 'If A then B' is supposed to be true whenever the antecedent 'A' is false. One solution would then be to exclude counterfactual conditionals from the logical system. The natural conditionals are thus divided into two categories: indicatives (If he asks me to marry him, I'll accept) and counterfactuals (If he had asked me to marry him, I would have accepted). In this connection, it is assumed that the counterfactuals imply that the antecedent is false. Moreover, conditionals in the subjunctive mood (If he were to ask me to marry him, I would accept), if understood as counterfactual, must then also be excluded

⁵ For instance, some (Grice 1989, Jackson 1991, Adams 1975) will have a theory only for indicative conditionals, since it is to be expected that counterfactuals cannot be interpreted as material or anything similar, while the indicative conditionals are closer to this kind of treatment. One will then also usually separate between truth conditions and assertion conditions for conditionals, arguing that the former coincide with the material conditional interpretation, while the second kind of conditions either supplement or replace the first kind. Others (Stalnaker 1968) have separate theories for counterfactuals, for instance in terms of possible-worlds. Here, one has found a tool that allegedly is suitable to deal with conditionals in which the antecedent is known to be false. However, on for instance Lewis' account, one considers the closest possible world in which the antecedent is true. The material conditional conditions are then the ones that must hold between the events in this world, that represent respectively the antecedent and the consequent of the subjunctive natural conditional, for the subjunctive conditional to be considered true. I.e., if all events that represent the consequent in this world are true, then the subjunctive conditional is considered true. Cf. Lewis (1973), pp. 27-29.

for the same reasons. One could then conclude that the present logical system, with the material conditional representing natural conditionals, shall only deal with conditionals of the indicative kind. Our claim is however that the material conditional is mistaken on all points, not merely with respect to counterfactuals. If this is correct, then an exclusion of counterfactuals will not substantially reduce the problem with the material conditional (and similar) interpretation of natural conditionals.

1.2 Degrees of hypotheticality

In ‘Conditionals: A typology’, Comrie offers an explanation for why the distinction between indicatives and counterfactuals does not help us to solve the problem of a material interpretation of conditionals. A counterfactual is a conditional construction from which the falsity of either the antecedent or the consequent can be logically deduced, but according to Comrie, such counterfactuality cannot be part of the conventional meaning of a conditional expression. The counterfactuality expressed in a subjunctive conditional can only be characterized as an implicature that can be cancelled in a context. For example: ‘If Jones had taken arsenic, Dr. Smith would have found arsenic during Jones’s autopsy.’ Although the conditional gives rise to the following implicature: ‘Jones didn’t take arsenic and Dr. Smith didn’t find arsenic during Jones’s autopsy’, this implicature can be cancelled: a subsequent discovery shows that (although the press kept it quiet), Jones did indeed take arsenic and Dr. Smith found arsenic during the autopsy.⁶ So instead of saying that conditionals of the subjunctive mood are counterfactual, then, one should rather say that they indicate a higher degree of hypotheticality than conditionals of the indicative mood.

This correlates to the claim of Johnston, who sees the English word ‘if’ as an assertion-canceling device. In his paper ‘The Paradox of Indicative Conditionals’, Johnston claims that the usual conception and identification of the distinction between indicative and subjunctive conditionals is actually mistaken. He argues that, in Old English, there was a grammatical difference between subjunctives and indicatives, which later lost its explicit form, first in speech, and later in written language. Johnston then gives a reclassification of conditionals and finds that most of what one today calls indicative conditionals in fact are subjunctives. Many of these conditionals will have an indicative syntactic form, but they

⁶ Sanford (1989), p. 79.

will also have identical truth conditions with their analogue subjunctives. This means that in originally syntactically subjunctive conditionals, whether they now have an indicative or a subjunctive syntactical form, the truth conditions and the conditional relation expressed remain unchanged under different degrees of hypotheticality:

- (a) If the butler didn't do it, then the maid did it.
- (b) If the butler was sick, he stayed at home.
- (c) If the butler was sick, he would stay at home.
- (d) If the butler is sick, he stays at home.
- (e) If the butler is sick, he'll stay at home.
- (f) If the butler be sick, he stays at home.
- (g) If the butler be sick, he'll stay at home.
- (h) If the butler were sick, he stayed at home.
- (i) If the butler were sick, he would stay at home.
- (j) If the butler had been sick, he would have stayed at home.

Here, (b) marks the lowest degree of hypotheticality, and (j) marks the highest. Since the conditionals in (b) through (j) all express the same relation between the antecedent and the consequent, Johnston claims that many apparently indicative conditionals, marked by a low degree of hypotheticality, were originally syntactically subjunctive conditionals. Therefore, according to Johnston, the conditionals in (b) through (j) all basically express the same (subjunctive) conditional relation.

However, since no hypotheticality is expressed in (a): 'If the butler didn't do it, then the maid did it', Johnston claims that it is an instance of a non-subjunctive (indicative) conditional. It will therefore not have identical truth conditions with its corresponding subjunctive conditional 'If the butler hadn't done it, then the maid would have'. The reason for this seems to be a shift in context between the indicative and the subjunctive conditional, as pointed out by McLaughlin:

[Adams] points out that we are inclined to accept the first of the following conditionals but not the second.

(1) If Oswald did not kill Kennedy, then someone else did it.

(2) If Oswald had not killed Kennedy, then someone else would have.

Let us observe, however, that the contexts of these statements are quite different. The second, being counterfactual in form, asks us to consider (contrary to the assumed facts) a situation in which Kennedy has not been assassinated and states that in that factual context, if Oswald does not kill Kennedy then someone else will. If we reject the statement, we do so because we lack sufficient reason to believe the social realities of that occasion entitle us to suppose that the events in question is so

related. The source of the plausibility of (1), however, is the assumption that someone killed Kennedy. Given this assumption, the statement that Oswald did not kill Kennedy entails that someone else did. (1) if true, is true as a logical deduction, not as a conditional. If the assumption is disallowed and if we are to consider (1) as asserting simply a conditional relation, we have no more confidence in its truth than we have in that of (2). Subjunctive and indicative ordinary conditionals assert the same relation; the contrary to fact subjunctive conditional indicates that we are to ignore certain facts, known to be true, in making a judgement as to the presence or absence of that relation in a situation now in the past.⁷

Due to the different contexts underlying these conditionals, i.e. that (1) is stated on the basis of an established fact, while (2) would need to be substantiated beyond such an established fact, (1) and (2) is understood to express different conditional relations, and hence, they diverge in truth conditions. More appropriate than associating (2) directly with (1) would then be to associate it with the indicative conditional (3) 'If Oswald does not kill Kennedy, then someone else will'. Hence we see that (2) and (3) express the same conditional relation under different degrees of hypotheticality, and they have identical truth conditions. The mistake is accordingly to associate (1) with (2), and then expect them to express the same conditional relation, and if they do not, to blame that on the grammatical distinction between indicative and subjunctive conditionals.

We agree with Johnston that most conditionals in English are in the subjunctive mood, such that their truth conditions remain unchanged under different degrees of hypotheticality. We further follow Comrie in recognizing different degrees of hypotheticality that are expressed by tense, aspect, and mood. We also agree with Comrie that the specific degrees of hypotheticality indicated by grammatical mood can be cancelled in a context. By introducing a distinction between types of conditionals that is independent of the distinction between indicative, subjunctive and counterfactual conditionals, so that the latter distinction must be understood as subordinated in importance to the first, we hope to reach a better understanding of natural conditionals.

2. A classification of natural conditionals

What determines the logical properties of natural conditionals is not the truth-values of the antecedent or the consequent, as in the truth functional material conditional or anything that can be sufficiently identified on a purely syntactical level, but rather the dependence

⁷ McLaughlin (1990), pp. 138-9.

relation between the antecedent and the consequent that is marked by the word ‘if’. In the present section, we try to give a systematic account of various types of dependence relations that can be expressed by means of a natural conditional ‘If A then B’. We then need to establish a system delineating different types of conditionals, as well as different uses of ‘if’. Instead of giving a unified account that is supposed to embrace all conditionals, we distinguish between four different uses of ‘if’ by means of natural conditionals, all of which have different dependence relations and logical properties. These are: i) ‘sufficient if’, where ‘if’ is used to express that the antecedent is a sufficient condition for the consequent and that the consequent is a necessary condition for the antecedent; ii) ‘non-sufficient if’, where the ‘if’ in conjunction with negation is used to deny the sufficient/necessary relation; iii) ‘doubt if’, where ‘if’ is used to express doubt about the antecedent; and iv) ‘relevance if’, where the antecedent makes the consequent relevant.

In addition, we distinguish between what we call causative and non-causative conditionals. By ‘causative’ we mean a kind of cause-effect relation, where the conditional relation assumingly holds between events. When the relation between antecedent and consequent does not involve a cause-effect relation, we have a ‘non-causative’ link, where the conditional relation assumingly holds between facts. We further follow Johnston’s distinction between ‘(ordinary) conditionals’ and ‘non-conditionals’ (what we will call ‘rhetorical conditionals’), where he notes that (ordinary) conditionals can undergo contraposition while non-conditionals cannot. We thus divide all conditional expressions into ordinary conditionals that have a cause-effect relation on the one hand and rhetorical (non-) conditionals that do not involve a cause-effect relation on the other.⁸

Our classification is motivated by and substantiated in use of examples. It is therefore important to note that these examples are used for this specific purpose, and should by no means be understood as having only one possible interpretation. The conditionals are here classified according to a specific interpretation of the conditional relation expressed, not

⁸ Another support for this distinction relates to topicality. Comrie assumes that in (ordinary) conditionals, the antecedent is the topic of the discourse, hence we have the preferential order antecedent-consequent. Cf. Comrie (1986), p. 86. This means that in an ordinary conditional, the order of the antecedent and the consequent in ‘If Socrates is a man, then he is mortal’ is preferable to the order in ‘Socrates is mortal if he is a man’. This is related to the fact that ordinary conditionals are hypotactic, and hence the relation between antecedent and consequent is directional. In rhetorical conditionals, however, it is the consequent that is given prominence and is the topic of the conversation.

according to an assumingly standard, conventional or “literal” meaning of conditional *sentences*. So whether or not one agrees with our interpretation and analysis of all the examples, we hope that they all in all contribute to the demonstration of our thesis that i) ‘if’ can be used to express several different types of conditional relations, and that this indicates that ii) conditionals cannot be given a unified account with respect to logical (or other) properties and iii) that the reason for this is not to be found in the syntactic distinction between indicative and subjunctive conditionals.

2.1 Ordinary conditionals

Despite the differences between the material conditional and natural conditionals that are discussed above, the ordinary conditionals do at least seem to be closer to a material conditional interpretation than other natural conditionals with respect to logical properties. The logical relation between antecedent and consequent in these conditionals consists in that the antecedent is a sufficient condition for the consequent, and the consequent is a necessary condition for the antecedent. This means that ordinary and material conditionals seem to have some logical properties in common, namely contraposition, modus ponens and modus tollens:⁹

1. Contraposition¹⁰
if A then B
∴ if not-B then not-A

2. Modus ponens
if A then B
A
∴ B

3. Modus tollens
if A then B
not-B
∴ not-A

Contraposition, modus ponens and modus tollens are formally valid for the material conditional, which means that when the formal rules of inference are applied to an argument with one of these forms, we will get the result that it is valid. Moreover, they are also contentually valid for ordinary conditionals, which means that true premises guarantee a true conclusion, as in the following examples:

1. Contraposition

If it rains, we’ll stay home.

Therefore, if we don’t stay home, then it doesn’t rain.

⁹ Hypothetical syllogism, constructive dilemma and absorption are also valid forms of inference for ordinary conditionals, but these will not be discussed further here.

¹⁰ Contraposition (transposition) is not actually an inference, but ‘If A then B’ and ‘If not-B then not-A’ are logically equivalent.

2. Modus ponens

If it's sunny, we'll go out.

It is sunny.

Therefore, we'll go out.

3. Modus tollens

If the light is on, she's home.

She is not home.

Therefore, the light is not on.

2.1.1 Generic conditionals

A generic conditional is a conditional construction in which we characteristically express a dependence relation between the antecedent and the consequent that is understood as universal whenever the conditions for the relation are satisfied. This dependence relation is taken as causative when an event A causes an event B to happen, and can be explained by means of for instance theories about physical laws, human psychology, biological processes, or other theories about continuities and connections in the world. These conditionals have the logical form 'If an x is in the state G, it will, as a result, be in the state H':

- (1) If an object is dropped, it will fall towards the ground.
- (2) If an iron bar is heated up, it expands.
- (3) If a body is unmoved by forces, it will continue in a uniform movement or stay at rest.
- (4) If a flower doesn't get water, it will die.
- (5) If a woman is pregnant, she will be more sensitive towards tastes and smells.
- (6) If a child is abused, she will have difficulties committing to others.
- (7) If a woman has problems in her relationship, she can't focus on her work.
- (8) If a man has problems at work, he can't focus on his relationship.
- (9) If ice is heated sufficiently, it turns to water.
- (10) If a creature can suffer, it has an interest to avoid pain and gain pleasure.

These conditionals are all used to express general statements, and they are true on the basis that the singular instances of them are true: 'If *this* iron bar is heated up, it will expand'; 'If *this pen* is dropped, it will fall towards the ground'; 'If *I* am pregnant, then I will be more sensitive towards tastes and smells', and so on. On the other hand, these singular conditionals are true on the basis that their corresponding general conditionals above are true. Thus the general conditionals and the singular instances of them are both parts of this class. The truth of these general conditionals depends on the truth of the corresponding categorical statement 'All x that are in the state G will as a result be in the state H', as for instance: 'All iron bars that are heated up will expand'. Or, formulated as a general

conditional: ‘All x are such that if G then H ’, we get the formulation: ‘All children are such that if they are abused, they will have difficulties committing to others’.

Since the conditionals in this class are used to express predictions about what will happen given the antecedent, they can be expressed by different degrees of hypotheticality, in the sense that the conditionals ‘If an object is dropped, it falls down’; ‘If an object is dropped, it will fall down’, and; ‘If an object were dropped, it would fall down’ all have the same truth conditions,¹¹ namely the dependence relation that can be established by the general physical laws of gravity.

In generic conditionals, the dependence relation between the antecedent and the consequent is taken as non-causative when a property is assigned to a general class of objects, such that ‘If an x is G then x has the property H ’:

- (11) If Madonna is an angel, then she has wings.
- (12) If n is an even number, then n is divisible on 2.
- (13) If Fifi is a dog, then she is mortal.
- (14) If this is a rat, then it has feelings.
- (15) If Socrates is a man, then he is an animal.
- (16) If Madonna is a Muslim, then she believes in Allah and Mohammed, the Prophet.
- (17) If x is a triangle, then x has three corners.
- (18) If Carl is unmarried, then he’s a bachelor.¹²

The truth of such conditionals is established based on the truth of their corresponding general categorical statements ‘All G s have the property H ’: ‘All men are animals’; ‘All angels have wings’; ‘All even numbers are divisible on 2’, and *vice versa*. So even though these conditionals have a singular form, they are used to express general relations that apply for all instances of a class. The truth of the non-causative generic conditionals depends on empirical observations, semantic definitions, mathematical theories, and so on.

The non-causative generic conditionals can serve to make predictions, and can thus occur with various hypotheticality: ‘If Socrates is a man, then he is mortal’ and ‘If Socrates were a man, he would be mortal’ have identical truth conditions; they are both true if it is true that all men are mortal and false if it is false that all men are mortal.

¹¹ We are not claiming that they have identical meaning or implicatures, but they are true or false under the same conditions.

¹² We see that the generic non-causative conditionals include the class of implication, where there is a logical (as in categorical) relation between ‘A’ and ‘B’.

2.1.2 Existential conditionals

An existential conditional construction is characteristically used to express a dependence relation between the antecedent and the consequent that is more directly connected to a specific context. This dependence relation is understood as causative when it is a relation between events that are not connected to any known law, and therefore cannot be interpreted outside the immediate context. These conditionals are used to express predictions of what consequent will follow from a particular antecedent in a particular situation, and they have the logical form ‘If p then q’:

- (19) If you go over and talk to that handsome doctor, your husband will get jealous.
- (20) If she is nice to you, she’ll want something in return.
- (21) If I had worn my red coat today, I would have passed my exam.
- (22) If a black cat crosses the road in front of me, something bad will happen to me.
- (23) If the Social Democratic Party wins the election, public schools will get more money.
- (24) If I have time, I’ll help you paint your living room.
- (25) If I’d got a raise, we would have gone to France.
- (26) If you can’t get your husband jealous, he’ll leave you for someone else.
- (27) If you came home earlier, I would be happy.
- (28) If you say you love me, I won’t leave (after all).
- (29) If everything goes as planned, we have nothing to worry about.
- (30) If Oswald hadn’t killed Kennedy, then someone else would have.
- (31) If the butler doesn’t do it, then the maid will.
- (32) If it stops raining, I can try my new bike.
- (33) If you had just listened to me, maybe I wouldn’t have left you.

The dependence relation expressed between antecedent and consequent in this class of conditionals is taken as more subjective than in the generic conditional. This class contains predictions about a dependency between particular event types. The truth of these conditionals can for instance depend on previous experience where a similar relation has been found (19), on features of character (20), probability (29), empirical data (23), human behavior (27), and so on. Causative existential conditionals are thus used to predict the outfall of the antecedent, and this prediction can for instance be based on experience of a more or less general relation between the antecedent and the consequent, or, as is the case in promises (24), on the utterer’s intention to perform the consequent on the condition that the antecedent is fulfilled.

These conditionals can be expressed with various degrees of hypotheticality, which means that the conditionals ‘If you go and talk to that handsome doctor, your husband will get jealous’ and ‘If you went and talked to that handsome doctor, your husband would be

jealous' have identical truth conditions; they are both true under the condition that the antecedent is a sufficient condition for the consequent. Whether an antecedent actually is a sufficient condition for a consequent in this class of conditionals can in most situations be argued over, and sometimes never agreed upon.

In the use of existential conditionals, the dependence relation is understood as non-causative when it is obtained from some particular fact. This fact can serve to make three types of conditionals. The first type of existential non-causative conditionals is used to express singular facts of the form 'Fa' by relying on general conditionals of the logical form 'For all x , if Gx then Hx ':

- (34) If I am Madonna, then I'm a superstar.
- (35) If your brother lives in Bergen, then he lives in Norway.
- (36) If she is married to John, then she's married to a man.
- (37) If I was born in 1711, I was born the same year as David Hume.
- (38) If I'm drinking the best coffee in town, then I'm drinking Cuppa Joe's coffee.

In this set of conditionals, the facts that are expressed are, respectively: Madonna is a superstar; Bergen is in Norway; John is a man; David Hume was born in 1711; and, Cuppa Joe has the best coffee in town. For each of these matters that are true, their corresponding conditionals above are true, and if they are false, the corresponding conditionals are false. This set of non-causative existential conditionals will have the same truth conditions under different degrees of hypotheticality: 'If I was born in 1711, I was born the same year as David Hume' and 'If I were born in 1711, I would have been born the same year as David Hume' are both true if David Hume was born in 1711.

The second kind of non-causative dependence relation in this class is typically used to express an alternative between two events 'Ga or Ha' by using the form 'If not Ga then Ha':

- (39) If I'm not at the dentist, I'm at Subterranean Books.
- (40) If she's not in her office, she's at home.
- (41) If he hadn't voted for the Socialists, he would have voted for the Green Party.
- (42) If I don't get a raise, I'll quit my job.
- (43) If I don't take the train, I'll take the bus.

In this set, the fact expressed is a disjunctive relation. The disjunctions 'I'm at the dentist or at Subterranean Books'; 'She is either in her office or at home'; 'He would have voted

for the Socialists or the Green Party', and so on, are all used to imply their corresponding conditional 'If not-A then B'. These conditionals will have the same truth conditions under various degrees of hypotheticality: 'If she is not at her office, she's at home', 'If she were not at her office, she'd be at home', and 'If she had not been at her office, she would have been at home'. This set of conditionals differs from the other types of ordinary conditionals in one respect, namely that the degree of hypotheticality influences the plausibility of a singular versus a general reading: When the indicative mood is used, the conditional can be interpreted as a singular instance given the appropriate context: 'Where can I meet you? – If I'm not at the dentist, I'm at Subterranean Books'. The conditional can also acquire a more general interpretation, given for instance that living habits are considered: If I am known to spend most of my time at the dentist or in the bookstore, anyone who wants to see me knows that if I'm not at the dentist, then I'm in the bookstore. The use of the subjunctive mood weakens the singular reading and invites a more general interpretation: 'If he hadn't voted for the Socialists, he would have voted for the Green Party' implies that even if he this time voted for the Socialists, he might have voted for the Green Party, since he in general votes for either of these parties.

The third kind of non-causative existential conditionals is the class of non-subjunctive (indicative) conditionals, as identified by Johnston. These conditionals are used to express a fact 'if not-p then q' that can be logically deduced from an established event 'r':

- (44) If the butler didn't do it, then the maid did it.
- (45) If Oswald didn't kill Kennedy, then someone else did.
- (46) If Jane bet on heads, she won.
- (47) If John didn't cancel his ferry ticket, he has drowned.

The established facts that are expressed can for instance be, respectively: that the butler and the maid were the only ones in the position to do this; that Kennedy is killed and Oswald is the main suspect; that the coin landed heads, and; that everybody on the ferry drowned. The non-subjunctive dependence relations above cannot be expressed within different degrees of hypotheticality, since we would then get a shift in context that would alter the conditional relation expressed. We can therefore draw the conclusion that this class of existential conditionals does not express hypothetical, but rather logical, conditional relations, based on some already established event.

We have here attempted to demonstrate that all the different classes of ordinary conditionals have the common feature that the dependence relation expressed between the antecedent and the consequent is a sufficient/necessary relation, which means that these conditionals take contraposition, modus ponens and modus tollens as valid forms of inference. Furthermore, our classification of these ordinary conditionals demonstrates that they in general will have the same truth conditions under various degrees of hypotheticality, on the condition that there is no shift of context.

2.2 Rhetorical conditionals

Rhetorical conditionals are conditional constructions in which the dependence relation between the antecedent and the consequent is exploited to achieve certain effects, as for instance, doubt, irony, warning, etc. In rhetorical conditionals ‘if’ is not used as signaling a sufficient condition, at least not in the same way as it is in ordinary conditionals, and consequently, none of them are reversible by contraposition. However, we will see that some rhetorical conditionals involve the use of modus ponens or modus tollens, but not both, since they could then be shown to be instances of ordinary conditionals, according to our classification. We have classified rhetorical conditionals into two classes, ‘contra-conditionals’ and ‘pseudo-conditionals’. In contra-conditionals, the sufficiency dependence relation between the antecedent and the consequent is denied, which means that they are closely related to ordinary conditionals. The dependence relation between antecedent and consequent can be causative or non-causative, which is expected, in view of their close relation to ordinary conditionals. In pseudo-conditionals, the role of the antecedent is downplayed, and modus ponens or modus tollens is exploited for rhetorical purposes.¹³

2.2.1 Contra-conditionals

Contra-conditionals are conditional constructions that on the surface have the logical form ‘If A then not-B’. But this does not mean that ‘A’ is used to express a sufficient condition for ‘not-B’. In these conditionals, the negation in the consequent takes the wide scope over the conditional, with the conditional being interpreted as ‘not (if A then B)’. In general, these conditionals are also used to assert the consequent ‘not-B’. The dependence relation

¹³ We acknowledge that our analysis of different uses of ‘if’ is not by any means complete, but we have attempted to include examples that have been more or less frequently used in the debate on conditionals. Although our classification of rhetorical conditionals are based on examples and discussions from numerous publications, the most central works for our analysis are the classifications of Byrne and Johnson-Laird (2002), Johnston (1996) and Haraldsen (2002).

between antecedent and consequent is taken as causative when an event A fails to trigger an event B:

- (48) If you gave me a million, I wouldn't do it.
- (49) If he begged on his bare knees, I wouldn't take him back.
- (50) If he won the lottery, he couldn't afford that car.
- (51) If US halts the bombing, North Vietnam will not agree to negotiate.
- (52) If I became a millionaire, I wouldn't quit my job.
- (53) If you put a gun to my head, I won't go to the stupid party.

This insufficiency of 'A' to trigger 'B' can be marked by supplementing the expression of the conditional with the words 'even' and 'still': 'Even if *this* antecedent, then *still* the consequent': 'Even if you gave me a million, I (still) wouldn't do it'. In these contra-conditionals, 'if' is used to express insufficiency with respect to the antecedent as a condition for the fulfillment of the expected consequent. This means that instead of expressing an ordinary dependence relation between 'A' and 'not-B', one denies a dependence relation by claiming 'not (if A then B)'. This denial gives rise to a contrary-to-expectation effect that puts the emphasis on the consequent, expressing a point of no return, and where the antecedent at the same time is doubted: So even if he begged on his bare knees, which I don't believe he would do, I would still not take him back, because nothing can make me take him back. Accordingly, the contra-conditionals are in general used to express denial with respect to the consequent 'B'. The contrary-to-expectation effect is emphasized in utterances where the most salient word in the antecedent is stressed: 'If he wins the *lottery*, he cannot afford that car', which prevents this type of conditionals from being interpreted as if the antecedent 'A' is a sufficient condition for 'not-B'.

The dependence relation between antecedent and consequent is taken as non-causative when a state of affairs 'A' devaluates an implicit assumption made in the consequent by using the logical form 'If A then not-B':

- (54) If he made a mistake, it wasn't a big mistake.
- (55) If my wife is having an affair, I'll never know it.
- (56) If there are any birds here at all, there are not many.
- (57) If I get a flush, I won't get a straight flush.
- (58) If you really are my brother, you are not a good brother.

In this type of conditionals, the consequent ‘not-B’ is asserted. At the same time, the antecedent is used to express doubt about some implicit assumption associated with the consequent by the use of a certain modifier in the consequent (e.g. never, big, many, and so on): ‘He didn’t make a big mistake’; ‘I won’t get a straight flush’; ‘There are not many birds here’, and so on. Since the state of affairs expressed in ‘B’ implies the state of affairs indicated in the antecedent, we use ‘if’ to express doubt about the antecedent and thus cancel the implicit assumption. So since the statement ‘You are not a good brother’ normally implies that you are my brother, this assumption is cancelled or modified by adding the antecedent ‘If you really are my brother’. The role of the antecedent is thus to modify an implicit assumption in the consequent.

Since both causative and non-causative contra-conditionals are used to assert their consequents ‘not-B’, or rather, to deny that anything is sufficient for the fulfillment of ‘B’, the inference from a contra-conditional ‘If A then not-B’ to its consequent ‘not-B’ may be said to be valid. Contra-conditionals can be expressed by various degrees of hypotheticality, since they are used to make a prediction, namely that the antecedent will not be a sufficient condition for negating the consequent ‘not-B’: ‘If you give me a million, I (still) won’t do it’, ‘If you gave me a million, I (still) wouldn’t do it’, and ‘If you had given me a million, I (still) wouldn’t have done it’.

2.2.2 Pseudo-conditionals

Pseudo-conditionals are conditional constructions in which the dependence relation between the antecedent and the consequent is not a sufficiency/necessity relation. Hence, pseudo-conditionals are not reversible by contraposition. However, they can take modus ponens or modus tollens according to the message to be conveyed, hence their rhetorical use. Pseudo-conditionals are interpreted existentially only.

Doubt conditionals

In this class of pseudo-conditionals, ‘if’ is used to express doubt about the antecedent. This is done by exploiting modus tollens to weaken or deny the antecedent. Doubt conditionals can thus be used to convey irony, cast doubt or express disbelief, or increase the credibility of the message; hence they are rhetorical in nature. In all cases, the consequent stands out as being unexpected. This effect of surprise is a characteristic feature of doubt conditionals, and it gives them an immediate and strong illocutionary force.

Irony is derived from the dependence relation ‘If a is G , then b is H ’, with ‘ H ’ being an unexpected match for ‘ G ’:

- (69) If you are the inventor of thumbtacks, then I’m the pope.
- (60) If he’s telling the truth, then I’m a Dutchman.
- (61) If this noise is music, then I’m tone-deaf.
- (62) If that is Madonna, then I’m Bart Simpson.
- (63) If Angela is nice, then I’m Mother Theresa.
- (64) If she is intelligent, then I’m Einstein.

The ironic message conveyed here is: Given that you believe the antecedent, then you could as well believe the consequent, however absurd it is. Hence the antecedent is stated to be equally absurd as the consequent. In this sense, the conditional contains a comparison between the two statements. In (63), one claims the absurdity of her being nice by adding the absurd consequent that I am Mother Theresa. These conditionals involve the implicit use of *modus tollens*: Since we know that it is absurd to claim that I am Mother Theresa, we can infer that it is equally absurd to claim that Angela is nice. Hence, one is supposed to infer that I here express serious doubt about the antecedent: Since it is more than doubtful that I am Mother Theresa, I must really be claiming that Angela is not very nice. This type of conditionals is expressed in a lower degree of hypotheticality, since the consequent cannot realistically be predicted from the antecedent.

Disbelief is derived from the dependence relation ‘If p then q ’, where the consequent ‘ q ’ is used to express something supposedly desirable that is not likely to happen, and thus one casts great doubt on or expresses strong disbelief about the antecedent ‘ p ’:

- (65) If this works, I’ll eat my hat.
- (66) If you make it, I’ll bend in the dust for you. (Norwegian expression)
- (67) If that coin lands heads, I’ll give you 100 bucks.
- (68) If she did this by herself, I take my hat off to her.

Idiomatic expressions such as ‘I’ll eat my hat’ or ‘I’ll bend in the dust for x ’, thrown in the consequent, are used to express utter flattery. The promise of performing the consequent given that the antecedent is fulfilled involves both the doubt about the antecedent and the expectation that one will not need to fulfill the promise. These conditionals are expressed in a lower degree of hypotheticality, as they are predictions of the outcome given the fulfillment of the antecedent, with an immediacy effect. They are not expressed in a higher

degree of hypotheticality, as the immediacy effect would then be removed and the consequent would lose its rhetorical force, given that the antecedent was already known to be probably not true. Here one makes use of modus tollens as a valid form of inference: The consequent is not likely to be true, and hence one is casting doubt on the antecedent.

Credibility is derived from the dependence relation ‘If not-p then q’, where ‘q’ is taken as something undesirable that is not likely to happen, therefore increasing the credibility of the claim that ‘p’:

- (69) If that isn’t Madonna, then call me an idiot!
- (70) If this isn’t ginger, I’ll put my hand out for cut. (French expression)
- (71) If I’m wrong, I’ll swallow my tongue.
- (72) May God strike me down if I’m lying.
- (73) If that wasn’t what happened, then call me a stool. (Norwegian expression)
- (74) If you can prove me wrong, I’ll give you a million.

Here as well, idiomatic expressions such as ‘I’ll swallow my tongue’ or ‘I’ll put my hand out for cut’ thrown in the consequent, express self-imposed punishment, thus increasing the credibility of one’s doubt about the antecedent. It is here not expected that one will actually have to perform the punishment expressed in the consequent, and sometimes it is even impossible to fulfill. If I have strong confidence in that woman being Madonna, I could risk my hand if it turns out that I am wrong. But if I am not one hundred percent certain, I will perhaps only risk my reputation: ‘Then call me an idiot!’ In this way one exploits modus tollens to cast doubt on the antecedent: I am not an idiot; therefore, she is Madonna. These conditionals are expressed in a lower degree of hypotheticality for the same reasons as above.

To sum up, in doubt conditionals modus tollens is exploited to cast doubt on the antecedent, with the consequent getting the prominence by bringing about some effect of surprise. This can serve to achieve rhetorical effects, such as conveying irony, casting doubt, or increasing credibility. Moreover, in addition to the validity of modus tollens, the inference from ‘If A then B’ to ‘not-A’ may be said to be valid for these conditionals, since they are used to express doubt with respect to the antecedent.

Relevance conditionals

In relevance conditionals, modus ponens is exploited to make the consequent relevant as an assertion, illocution, or as a non-factuality; hence ‘if’ is used to mark a relevance condition.

When the consequent is used to express assertions, the relevance conditionals are of the following kind:

- (75) If you want, you can come to my place tomorrow.
- (76) If you are hungry, there’s food in the kitchen.
- (77) If you’ve run out of gas, there’s a garage around the corner.
- (78) If you must know, he stayed over last night.
- (79) If I have something to say, I don’t think you should marry him.
- (80) If I can interrupt, those numbers are not updated.
- (81) If you wish to be left alone, I can leave.
- (82) If you really want to know, your wife’s having an affair.
- (83) If you want to see me tomorrow, I’ll be in my office.
- (84) If you are free this evening, I’ll take you out for dinner.

In this set, the consequent is not predictable from the antecedent. Rather, one asserts the consequent, and the antecedent makes the information in the consequent relevant by attaching it to a specific context. Instead of just saying: ‘There’s a garage around the corner’, one can add for clarification: ‘If you have run out of gas’. The conditional indicates a tacit ordinary but obviously plausible conditional which could be stated as follows: ‘If you have run out of gas, you will be interested to know the whereabouts of the closest garage or gas station’. Thus these conditionals could be said to contain a suppressed interrogation in the antecedent, and one may therefore reformulate the antecedent into a question: ‘Are you hungry?’ and then add the assertion in the consequent: ‘Because if you are, there is food in the kitchen.’ But this does not mean that one can remove the conditional form by rephrasing the sentence. One will still need words as ‘if’ or ‘in that case’ to convey the same message: ‘Do you want to be left alone? If so, I can leave.’ Hence, these relevance conditionals contain two different types of illocutions: a question in the antecedent and an assertion in the consequent. In some contexts, the antecedent in this sub-class is superfluous, and one can then state only the consequent. But mostly the antecedent serves an important conversational purpose that would be lost without it. When the consequent is used as an assertion, the pseudo-conditional is expressed in a lower degree of hypotheticality.

When the consequent is used to express an illocution other than assertion, the relevance conditionals are of the following kind:

- (85) If you see Peter, tell him I'm looking for him!
- (86) If you have something to say, can you say it?
- (87) If I tell you where I hid your earrings, can you forgive me?
- (88) If I made a mistake, then shoot me!
- (89) If you give her the ring, I hereby pronounce you husband and wife.
- (90) If a person witnesses a murder, he has an obligation to report it.
- (91) If you ever speak to me again, you know what'll happen.
- (92) If you don't give me what I want, I promise that you will regret it.
- (93) If you have time, can you help me with this assignment?
- (94) If you give me one more chance, I promise I won't let you down.
- (95) If you're thinking about going to that concert, forget about it!
- (96) If you want to avoid a ticket, then you can park your car on the other side of the street.
- (97) If you hadn't stopped me, I don't dare think about what could've happened.
- (98) If you were me, then what would you have done?
- (99) If I tell you to do something, you should do it.
- (100) If the lab animals suffer, we ought to do something about it.

The consequent is here not predicted from the antecedent. Instead, the antecedent is hypothetically assertive while the consequent has an illocutionary force other than assertion, for instance as a question, a demand, a promise, a vow, or as a normative statement. These conditionals seem to occur with various degrees of hypotheticality according to the force of the illocution: The lower the hypotheticality, the stronger the illocutionary force.

When the consequent is used to express non-factuality, the relevance conditionals are of the following kind:

- (101) If I had a sister, I would want her to be like you.
- (102) If I were you, I'd leave him.
- (103) If I were Madonna, I'd use my influence on kids to keep them away from drugs.
- (104) If he had been here, I would have been the happiest woman on earth.
- (105) If I weren't so damn shy, I would have tried to kiss you.
- (106) If I were in his situation, I would never have been so brave.
- (107) If I had your brains, I wouldn't have wasted it on business.
- (108) If I were in charge, I would make it illegal to own more than one car.
- (109) If you were in my situation, you would never have been so stupid.

The conditionals in this set are used with a higher degree of hypotheticality, which is usually associated with counterfactuals. These relevance conditionals are employed to

express hopes, wishes, advises, or opinions in general. The messages conveyed in this type of conditionals can be expressed without using the conditional form, as for instance: ‘I wish I had a sister like you’; ‘I think Madonna should use her influence on kids to keep them away from drugs’; ‘I wish I had the guts to kiss you’; ‘I think you should use your brains to something better than business’, and so on.

To sum up, in relevance conditionals, modus ponens is exploited to give prominence to the consequent. In addition to the validity of modus ponens, the inference from ‘If A then B’ to ‘B’ can be said to be valid for these conditionals, since the consequent is put forward, regardless of the truth of the antecedent. Relevance conditionals occur with various degrees of hypotheticality, according to whether the consequent is used to express an assertion, an illocution of some other type than assertion, or a non-factuality.

3. Outline of the classification

As pointed out in section 1, according to a material conditional interpretation of natural conditionals, ‘if’ is used to express a sufficient/necessary relation; hence it has the logical properties of taking contraposition, modus ponens and modus tollens as valid forms of inference. However, as seen in our classification, not all conditionals have all these logical properties. Therefore, at least two types of natural conditionals had to be recognized, hence the distinction between ordinary conditionals that seem to have some logical properties in common with the material conditional, and rhetorical conditionals that do not have (all) these logical properties. Our classification can be schematized as follows:

Natural conditionals							
Ordinary conditionals <i>sufficient ‘if’</i>				Rhetorical conditionals			
Generic		Existential		contra-conditionals <i>non-sufficient ‘if’</i>		pseudo-conditionals	
causative	non-causative	causative	non-causative	causative	non-causative	doubt conditionals	relevance conditionals
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)

Examples of the different classes in our system (where example A refers to class A above, example B refers to class B, and so on) are:

- (A) If I drop this pen, it will fall.
 (B) If Socrates is a man, he’s mortal.

- (C) If I have time, I'll help you.
- (D) If your brother lives in Bergen, then he lives in Norway.
- (E) If he wins the lottery, he cannot afford this car.
- (F) If he made a mistake, it wasn't a big mistake.
- (G) If this works, I'll eat my hat.
- (H) If you are hungry, there is food in the kitchen.

Our study indicates that though the dependence relation between antecedent and consequent in a conditional cannot directly be given a unified account, by for instance mixing ordinary and rhetorical conditionals, there is no doubt that there is always presupposed such a dependence relation in all the types of conditionals that we have looked into. As shown above, rhetorical conditionals relate in one way or another to an ordinary conditional dependence relation, and they could not have performed all their rhetorical tasks if they did not. The different types of dependence relation corresponding to different uses of 'if' have different logical properties, as shown in the following scheme:

Dependence relation	Logical properties		
	Contraposition	Modus ponens	Modus tollens
Sufficient 'if'	+	+	+
Non-sufficient 'if'	—	—	—
Doubt 'if'	—	—	+
Relevance 'if'	—	+	—

What all conditionals have in common is that the validity of both modus ponens and modus tollens determines contraposition. When modus ponens and modus tollens are both valid, we also have contraposition, and 'if' has a sufficiency reading. This characterizes the set of ordinary conditionals. When only modus ponens or only modus tollens is valid, we do not have contraposition, and 'if' has a non-sufficiency, doubt or relevance reading. This characterizes the set of rhetorical conditionals. As seen above, doubt 'if' and relevance 'if' are associated with pseudo-conditionals, while non-sufficient 'if' is associated with contra-conditionals. To seek one single answer to the question 'What is the dependence relation of a conditional?' thus seems seriously misconceived.

Now one might be tempted to conclude from our analysis that ordinary conditionals, having several logical properties in common with material conditionals, are fairly adequately reconstructed by the material conditional or similar interpretations. However, the discrepancies between ordinary and material conditionals are much deeper than they

seem; in fact, ordinary and rhetorical conditionals have more in common than ordinary and material conditionals. There are several reasons for this: First of all, focusing exclusively on possible combinations of truth-values for any given pair of statements, the material conditional is content-insensitive. The material conditional should be placed on a meta-level in relation to natural language where the ordinary and rhetorical conditionals are used to express dependence relations between facts or events, not between truth-values of linguistic entities. None of these natural conditionals can abstract from their content.

That ordinary and material conditionals have some logical properties in common is thus not due to the exactness of the material conditional as an interpretation of natural conditionals. On the contrary, these are properties of the ordinary conditional that, if completely handed over to material conditional treatment, would be reduced in meaning to absolutely nothing. The material conditional means nothing but the following purely conventional rule: The ordered pair of arbitrary chosen statements (AB) is allowed to have the following ordered pairs of truth-values: (TT), (FT), (FF). So unless we read natural conditional properties into the material conditional, we would not get any sense of saying things like: ‘*If* the antecedent is true, *then* the consequent must be true as well’ or ‘*If* the premises are true, *then* the conclusion must also be true’ or ‘*If* the conditional is an ordinary conditional, it takes contraposition’. And how would we then be able to explain the validity of modus ponens and modus tollens in a meaningful way? In fact, the only reason why the material conditional seems to be intuitively well defined via modus ponens and modus tollens, is that the conditional is already assumed in the premises. And then of course we would never interpret it as material, meaning only (TT), (FT), (FF). In fact, equally valid inferences for the *material* conditional are the following:

$$\begin{array}{ccc}
 \begin{array}{c} P \\ Q \\ \hline P \supset Q \end{array} &
 \begin{array}{c} \neg P \\ \neg Q \\ \hline P \supset Q \end{array} &
 \begin{array}{c} \neg P \\ Q \\ \hline P \supset Q \end{array}
 \end{array}$$

From these forms of inference we would certainly not be misled to conclude that the material conditional gives us the logical properties of natural conditionals. On the contrary, we must realize that the material conditional is parasitic on natural conditionals: It gets its meaning and plausibility entirely from our intuitive understanding of natural conditional dependence relations.

Although the classification of conditionals proposed here is not in any way thought to be exhaustive, it is nevertheless meant to provide a systematic account of natural conditionals, given their logical properties as outlined above. It is to be expected that the properties of natural conditionals in English will be found in other languages as well. These properties do not seem to depend on a language-particular structure, but rather on the dependence relations between pairs of clauses somehow related through conditional relationships, and on how these relations may be exploited. However, for what purposes these dependence relations are being exploited is in part language dependent; this seems at least to be the case with respect to the rhetorical conditionals. The different degrees of hypotheticality indicated likewise seem to depend on the language-particular system of tense, aspect and mood. What is possible in English may not be possible in other languages. Thus our results have confirmed our initial assumption that the syntactically indicated distinction between indicative and subjunctive conditionals is far less important for an adequate grasp of conditionals than is usually assumed. Instead the classification has shown in what various ways the conditional relations intended most directly by ordinary conditionals are the keys to the understanding of conditionals in general. In adopting this approach, we hope to have achieved a better understanding of what conditionals are all about.

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ⁱ This is not the final version of this paper, but Schapansky has allowed me to print it in its present form for my thesis.