

Pseudo-imperatives and other cases of conditional conjunction and conjunctive disjunction*

Michael Franke
University of Amsterdam

Pseudo-imperatives, a special kind of sentential conjunctions and disjunctions, display a surprisingly divergent preference bias. This paper aims to explain this pragmatic preference puzzle based on the different discourse segmentation behavior of conjunction *and* and disjunction *or*. To lend credence to the suggested explanation, related non-standard uses of conjunction and disjunction will be discussed in detail.

Keywords: pseudo-imperatives, discourse relations, non-standard uses of conjunction/disjunction

1. Pseudo-imperatives and a pragmatic puzzle

1.1 The problem of pragmatic asymmetry

There is an interesting pragmatic asymmetry in the following pattern (cf. van der Auwera, 1986):¹

- | | | | |
|-----|----|---------------------------------------|-------------------------|
| (1) | a. | Close the window and I will kiss you. | (A and P ⁺) |
| | b. | Close the window and I will kill you. | (A and P ⁻) |
| | c. | Close the window or I will kill you. | (A or P ⁻) |
| | d. | ?Close the window or I will kiss you. | (A or P ⁺) |

* A lot of people have helped me considerably in writing this text including the anonymous reviewers. I'm thankful to all of them. Anke Lüdeling kindly provided me with access to the corpora that I have used and I am particularly grateful for that, as well as for the stimulation I have received from discussions with Robert van Rooij, Martin Stokhof, Paul Dekker and Magdalena Schwager. Thanks to Tikitu de Jager for proofreading. Needless to say, all errors are my own.

1. I assume here for the sake of the example that (it is common knowledge between interlocutors that) the hearer wants to be kissed by the sender, but not killed. I will write P⁺ (P⁻) for declarative clauses that denote (un-)desirable propositions in this sense.

I will call the sentences in (1) *pseudo-imperatives*,² or PIs for short, which I take to be a label for a particular surface form: an imperative clause³ *A* is followed by either *and* or *or* which is followed by a declarative clause *P*. If we assume that in a given context the hearer has a clear preference whether the content expressed by the declarative clause *P* of a pseudo-imperative should become true or not, each sentence (1a–1c) is a natural argument for or against the act named by *A*: (1a) and (1c) are arguments for, (1b) is an argument against. However, sentence (1d) is not a natural thing to say at all: for fixed hearer-desirability of *P* it is simply infelicitous. In particular, the infelicitous (1d) is not an argument *against* the act named in *A*, although this might be expected when looking at the conditional sentences in (2) which correspond loosely to each sentence in (1).

- (2) a. If you close the window, I will kiss you. (If *A*, then *P*⁺)
 b. If you close the window, I will kill you. (If *A*, then *P*⁻)
 c. If you don't close the window, I will kill you. (If not-*A*, then *P*⁻)
 d. If you don't close the window, I will kiss you. (If not-*A*, then *P*⁺)

For the conditional sentences in (2) the picture is entirely symmetric: positive (negative) consequences of act *A* are an argument for (against) it, while positive (negative) consequences of not-*A* are an argument against (for) *A*. This symmetry in (2) is broken in (1) by the infelicity of (1d).

This paper takes this *Problem of Pragmatic Asymmetry* (PoPA) observed in pseudo-imperatives as its starting point. The puzzle can be approached from two sides. Firstly, (i) we should ask why there are instantiations of variable *X* so that (3a) becomes an argument against *A*, while there are no instantiations of *X* that turn (3b) into an argument against *A*.

- (3) a. Do *A* and *X* will be the case/happen.
 b. Do *A* or *Y* will be the case/happen.

Secondly, (ii) we should ask why instantiations of *X* in (3a) may be desirable or undesirable to the hearer, while instantiations of *Y* in (3b) may not be hearer-desirable.⁴

2. This does not quite match Clark's (1993) terminology where the term was chosen for its particular connotation. In this paper I do not want to hint at a possible difference between genuine imperatives and mere pseudo-cases. Here "pseudo-imperative" is just a name for a particular linguistic form.

3. Let me justify this categorization: It is indeed not entirely self-evident that the first connect in sentences (1) is really an imperative clause. It might as well be an infinitive or a bare VP (see Bolinger, 1979, for some early discussion). Although this paper deals with English, I take the fact that other languages, such as German or modern Greek (cf. Han, 1998), have parallel constructions where the first connect morpho-syntactically is undeniably an imperative clause to be reason enough to reject the idea that in English these forms should be anything else than imperative clauses (contra Russell, 2007).

4. Strictly speaking, these two questions really address two different problems, or at least two different challenges from the same problem set. Nevertheless, there is an obvious connection.

1.2 Some possible solution strategies

There are several ways in which the PoPA might be solved. Let me sketch some possibilities in order to briefly discuss previous accounts and to situate the current contribution more clearly in the greater scheme of things.⁵

1.2.1 *Pragmatics only*

Perhaps the most appealing account for the PoPA would be entirely pragmatic in terms of principles of how to say what and what not to say when, especially in order to influence someone else's behavior or judgment.⁶ Here is a rough sketch of such a purely pragmatic account. Suppose that we start with the minimal assumption that the pseudo-imperatives in (1) are semantically equivalent to the conditional sentences in (2) one by one. Then, obviously, whatever pragmatic account for the infelicity of (1d) we would like to give, we would have to take into consideration that, after all, (2d) is acceptable. So we need to acknowledge at least some difference between the disjunction (1d) and the conditional (2d). In Franke (2005a) I suggested that the difference might be found in topicality or aboutness. With some intuitive plausibility we could say that conditionals (2c) and (2d) mention, refer to or talk about not-*A*. Disjunctions (1c) and (1d), on the other hand, mention or talk about *A* instead while still giving conditional information about what happens when *A* is not performed. Based on this intuition we might endorse the following Mention-Principle:

Mention-Principle: Do not bring to attention an action that you do not want to be performed (because mentioning choices just makes them salient and more probable to be chosen), unless you immediately discredit what you mention (by stating negative consequences of it, for instance).

It is not crucial to find the Mention-Principle convincing as long as it helps illustrate what a purely pragmatic approach could look like. For it is palpable that only (1d)

For instance, suppose we have a satisfactory independent explanation for the preference bias in (3b) as an answer to question (ii). Then an answer to question (i) may be given on top of that. We could say that in order to be an argument against *A*, (3b) needs a desirable *Y*, because this is how conditional information influences choice of action. But (3b) cannot get a positive *Y* by assumption. Hence it cannot be an argument against *A*. But clearly not every such argument that connects (i) and (ii) needs to be accepted. In this sense, the two questions should be kept apart and each account of the PoPA should make clear whether the chicken or the egg part of the puzzle is solved first and how we get from one to the other.

5. The present approach restricts itself to semantic and pragmatic considerations. More syntactic considerations are left for another occasion.

6. Both van der Auwera (1986) and Clark (1993) propose a solution that fits into this category. For discussion and criticism of these and other accounts see Franke (2005b) and Schwager (2006).

violates this principle while all other sentences in (1) and (2) agree with it. So here we have a rough sketch of a pure pragmatic solution to (aspect (ii) of) the PoPA.

One of the driving ideas of this paper is that a pure pragmatic explanation of the PoPA as outlined here, however plausible on its own, would ignore a considerable amount of (at least *prima facie*) relevant empirical data. It is therefore the central concern of this paper to give further, mostly authentic and in this context hitherto overlooked data in order to put PIs into a broader linguistic perspective. Doing so will support a particular alternative approach, namely the Connector Hypothesis which I will introduce in section 1.3 and whose plausibility I will discuss critically thereafter.

1.2.2 *Forceless imperative clauses*

To appreciate the central hypothesis of this paper, it is advisory to contrast it with a superficially similar, but different solution strategy. The solution strategy I have in mind here is based on the following idea. Suppose that we can make plausible that imperative clauses are associated with directive force in most, but not all linguistic contexts. In particular, consider the following Force Hypothesis:⁷

Force Hypothesis: If an imperative clause is followed by conjunction and and a declarative it will not be associated with directive force, but if followed by disjunction or and a declarative clause it will.

Indeed, the Force Hypothesis gives us an answer to question (i) of the PoPA: PIs with conjunction, call them conjunctive pseudo-imperatives (ConjPIs), are not associated with directive force, but disjunctive pseudo-imperatives (DisjPIs) are. Hence, a ConjPI (3a) can be an argument for and against the content of its imperative clause *A*, but a DisjPI (3b) cannot be an argument against *A*, because here the imperative clause is always associated with the directive force that *A* should be performed.

Obviously, (any serious careful formulation of) the Force Hypothesis needs independent support. What is needed is independent morpho-syntactic evidence that imperative clauses lose their directive force exactly in those contexts where they can be used to argue against the performance of the act they describe. Perhaps such independent evidence can be found. Again, I do not want to argue that there is no plausible continuation of this idea. At present, I want to suggest a similar, but different hypothesis for which independent evidence can be given easily in terms of parallel examples that do not involve imperatives at all. And once more, I argue that this approach has an

7. For any serious proposal along these lines more severe qualifications are necessary and, of course, have been spelled out by followers of this strategy such as Han (1998) and Russell (2007). To name just one example of such a refinement, we obviously have to require the absence of speech-act triggers such as *please* (see Bolinger, 1979). I omit the details and refer the reader again to the discussion in Franke (2005b) and Schwager (2006).

advantage also over the Force Hypothesis in that it places our explanandum in a wider context of relevant examples.

1.3 The Connector Hypothesis

Let me start by suggesting and evaluating critically an account of the PoPA based on what I will call the Connector Hypothesis (CH). The idea behind the CH is that it is not pragmatic principles of debate or the pragma-semantic properties of imperatives that are responsible for the pragmatic asymmetry in PIs, but rather properties of the sentential connectors *and* and *or*. I want to suggest that connectors *and* and *or* in PIs have different discourse segmentation properties. To spell out the CH, I will therefore first briefly introduce this difference in discourse segmentation behavior in section 1.3.1. Subsequently, in section 1.3.2, I will investigate authentic PIs in order to assess, again on an intuitive basis only, their discourse segmentation behavior. This finally leads to a concrete formulation of the CH in section 1.3.3.

1.3.1 Discourse segmentation

According to Mann and Thompson (1987), discourse interpretation is a three-step procedure consisting of:

- Segmentation: What are the units of discourse?
- Relation: Which units of discourse relate to each other and what is the relation between them?
- Coordination: Which hierarchical structure holds between related units of discourse; which ones, if any, are subordinate?

Especially in the context of sentential connections such as PIs whose connects are of different clause types the segmentation step is not trivial and deserves extra attention. For a simple motivating example, consider the sentences in (4).

- (4) a. Drive past the gas station and then, after five minutes, you will see the roundabout.
- b. Drive past the gas station until you see the roundabout.

Intuitively, at speech-act level we have two discourse units in (4a), but only one in (4b): (4a) gives advice about driving in a certain direction followed by the statement that, if that direction is followed, the roundabout will be reached. In clear contrast, (4b) is just a directive to drive in a certain direction for a specific amount of time. In other words, the clause “you will see the roundabout” in (4b) is not realized as a speech-act in its own right, because of the (semantically subordinating) connector *until*, while in (4a) both connects of the (presumably semantically coordinating) connector *and* (*then*) give rise to two separate speech-acts.

This simple observation suggests the following intuitive distinction: (an occurrence of) a sentential connection “ $X \otimes Y$ ”, where X and Y are sentences or clauses and

⊗ is a sentential connector such as *until* or *and*, is *discourse separating* if the connects *X* and *Y* are treated as separate discourse units and are thus associated with separate communicative events, or speech acts (in a particular discourse context); otherwise, if (an occurrence of) “*X* ⊗ *Y*” is treated as one communicative event and both connects together are associated with one speech act (in a particular discourse context), (this occurrence of) “*X* ⊗ *Y*” is *discourse integrating*.⁸

1.3.2 *Pseudo-imperatives in the wild*

The distinction between discourse separating and discourse integrating sentential connections is based merely on introspection. At present, I am not interested in theoretical refinement. Rather, I suggest to apply naive intuition about discourse segmentation behavior of connections to a selection of wild examples of PIs collected from various sources. To start with, here are three cases of ConjPIs:

- (5) a. The creature sighed, ‘Come closer and I will tell you a great secret.’ I moved closer, until I could see my own breath condense on its skeletal shoulder.
(<http://elfwood.lysator.liu.se/libr/s/h/shalene/random.html>, 17.8.2006)
- b. Please send me the issues you are experiencing, and I will update this page, along with information when they are resolved.
(<http://www.bloglet.com>, 17.8.2006)
- c. “And now rearrange yourself,” I said, “and in the meanwhile I will go and wash the baby.”
(<http://www.worldwideschool.org/library/books/lit/shortstories/ThroughRussia/Chap1.html>, 17.8.2006)

The examples in (5) are all authentic examples corresponding more or less to the artificial (1a): for instance, under the likely assumption that the addressee wants to be told a great secret, the whole sentence urges him or her to come closer. The other examples are similar in this respect. But now ask yourself: are the examples in (5) discourse separating or discourse integrating connections? For instance in (5a), does the creature give a directive followed by a (conditional) statement or does the creature only assert a (conditional) statement? Maybe the following three readings are most plausible:

- (6) a. inform(“if you come closer, I will tell you a secret”)
- b. direct(“send issues”) & inform(“if you send, I will update”)
- c. direct(“rearrange yourself”) & inform(“I will wash the baby”)

8. The ideas of discourse integrating connections and non-veridical discourse relations in Segmented Discourse Representation Theory (Asher and Lascarides, 2003) are related but not identical: the former is a property of a linguistic form (token), the latter is a property of a semantic object (token).

Example (5a) could well just be an assertion of a conditional, (5b) gives a clear directive followed by a conditional statement, and (5c) gives a directive followed by a non-conditional statement.

There is plenty of room for disagreement about the judgments in (6a). But this is not crucial for the argument that I would like to make. There are other examples where things are less controversial. Here is one:

- (7) Say one more word and I'll scream!

(From the song 'Show me' from the musical *My Fair Lady*
by Frederik Loewe and Alan J. Lerner)

To my mind, example (7), which corresponds to (1b), can only be treated as a discourse integrating connection: a statement of a conditional as in (8a).

- (8) a. inform("if you say one more word, I'll scream")
b. directive("say one more word") & inform("(if you do) I will scream")
c. directive("don't say one more word") & inform("(if you do) I will scream")

Clearly, (7) does *not* get reading (8b), and even (8c) seems implausible, because it is unclear how an imperative clause can give rise to a directive with the exact opposite content of what is mentioned.⁹

To remove all doubt that there are examples of discourse integrating conditional-like ConjPIs consider finally the following example:

- (9) 'You see what kind of people they are,' he said: his eyes moved around restlessly, he did not seem to be speaking to anyone in particular. 'You think there is nothing and all the time the ground beneath your feet is rotten with tunnels. Look around a place like this and you would swear there wasn't a living soul in miles. Then turn your back and they come crawling out of the ground. [...]'
(J.M. Coetzee, 'Life and Times of Michael K', pp. 121–2)¹⁰

The last ConjPI in (9) certainly does not get reading (10b) or (10c), but simply (10a).

- (10) a. inform("if you turn your back, they come crawling out")
b. directive("turn your back") & inform("(if you do) they come crawling out")
c. directive("don't turn your back") & inform("(if you do) they come crawling out")

9. In fact, both van der Auwera (1986) and Clark (1993) maintain that under certain circumstances an imperative clause can be interpreted like an ironic or sarcastic remark to mean the opposite of what has been said literally. Still I find it implausible to argue for analysis (8c) on these grounds, because in order to be perceived as ironic or sarcastic it is necessary that the literal content is assessed as if meant literally after all. But this is not intuitive for cases like (7) where it is not the case that the imperative clause is first taken literally and then reinterpreted along pragmatic principles.

10. Page numbers refer to the Vintage 2004 paperback edition.

Example (9) is special, not only because it clearly does not involve an imperative speech act, but also because it involves a different modality than the examples that we have considered so far: other examples referred to the concrete immediate future, but (9) states a generic relationship between events. We could speak of *generic ConjPIs* here. The crucial observation is that generic ConjPIs are *clear* cases of discourse integrating ConjPIs with a conditional-like interpretation. The reason why this is crucial is because it contrasts with DisjPIs. First of all, look at some genuine examples:

- (11) a. The relevant Minister for Finance and the Budget says, ‘Put the brakes on or we will lose our European Union aid!’
(From corpus: Europarl (en) (EU-EN), 2049840)
- b. Don’t bother to resist, or I’ll beat you
(From the song ‘The Beautiful People’ by Marilyn Manson)
- c. Bush Tells UN, Make War or I Will
(<http://www.thenation.com/blogs/capitalgames?pid=100>, 17.8.2006)

In all examples in (11) the speaker urges the addressee to bring about some state of affairs or perform some action and further enhances this urge by a threat. In example (11a), for instance, the minister demands that the breaks be put on and threatens that if the brakes are not put on something bad will happen:

- (12) direct(“put brakes on”) & inform(“if brakes are not put on, we lose aid”)

In other words, sentence (11a) is a discourse separating connection. This is similar for the other examples in (11) and, it seems, for *most, if not all* DisjPIs.

There is but one class of DisjPIs for which it is not clear whether they are discourse separating or discourse integrating. These are sentences like (13) which we could call *generic DisjPIs* because, like generic ConjPIs, they too refer to a generic conditional relation between events.

- (13) a. I’m telling you, working for a successful start-up is no fun. The atmosphere is so tensed. Agree to everything he says, or your boss fires you immediately.
- b. Speak at least six languages or you are not a cosmopolitan.

I will come back to generic DisjPIs in section 4 where I discuss whether these cases are a threat to the CH in its strong formulation given next.

1.3.3 The Connector Hypothesis: formulation & application

The PoPA can be accounted for if we assume that conjunction *and* and disjunction *or*, as they occur in PIs, have a different discourse segmentation behavior:

Connector Hypothesis (CH): While ConjPIs can be discourse integrating connections, in which case they get a pure conditional-like reading such as (6a), or discourse separating connections, in which case they get a speech-act

conjunction reading such as (6c), DisjPIs can be discourse separating connections only and they always get a speech-act conjunction reading as in (12).

Based on the CH the following pragmatic account of the PoPA can be given. If a DisjPI like (3b) is a discourse separating connection like (12), it will always contain a directive to perform act *A*. Hence, the whole disjunction cannot possibly be an argument against *A*. This answers part (i) of the PoPA, the question why a DisjPI cannot be an argument against the content of its imperative connect.

As for part (ii) of the PoPA, the presence of a directive to perform *A* also explains why a (hearer-)desirable declarative connect *Y* is pragmatically infelicitous in (3b). If *Y* is desirable then the conditional statement “If not-*A*, then *Y*” urges the addressee not to bring about or perform *A*, but at the same time the addressee is told to do so by the directive. This is clearly incongruous, hence the infelicity.

Like the Force Hypothesis, the CH also requires independent evidence in its support. In particular, there are three issues to be addressed in order to lend credence to the CH: firstly, the claim that there are discourse integrating conditional-like readings of English *and* needs support; this will be given in section 2. Secondly, we need evidence for the stipulated discourse separating readings of English *or*. To this end, section 3 gives corroborating examples of discourse separating *or* which, to the very best of my knowledge, have not been addressed in the relevant literature in this form. Finally, we have to justify the claim that DisjPIs can *only* be discourse separating. This is the Achilles tendon of the CH and I will address this issue critically when I turn to a closer investigation of generic DisjPIs in section 4.

2. Conditional conjunction

2.1 The problem of conditional conjunction

It is not surprising that *and* can realize a speech-act conjunction as in (6b) and (6c). Similarly it is not surprising that, in (6b), the declarative connect *P* of a ConjPI is interpreted in the context of *A*, as it may be considered a modal subordination phenomenon (Roberts, 1989) and has parallel examples in contexts different from ConjPIs such as in (14).

- (14) “I’m leaving one for all the others,” said Rabbit, “and telling them what it means, and they’ll search too. I’m in a hurry, good-bye.” And he had run off.
(A.A. Milne, *The House at Pooh Corner*, ‘In which Eeyore finds the Wolery and Owl moves into it’)

In (14) Rabbit’s prognosis that the others will search too is interpreted in the context of, i.e., conditional upon, the others receiving and understanding Owl’s Mysterious Message (the subject of conversation at that particular point in the story).

What is much more surprising is the behavior of discourse integrating conjunction with its conditional-like readings, as in (6a). However, it has been observed before that *conditional conjunctions*, as we might want to call them, occur in a variety of contexts (cf. Culicover and Jackendoff, 1997; Schwager, 2006). Apart from ConjPIs, there are three further contexts in which *and* is naturally interpreted to express a conditional relationship between connects. First of all, we find conjunctions of declaratives (15), either with the simple present tense in both connects as in (15a), where, in the present case, we find a generic interpretation, or with a simple present tense in the first connect and a will-future in the second (15b), where, in the present case, we find a conditional interpretation relating to the immediate future course of events.

- (15) a. I am not sure he is wholly of this world. One tries to imagine him running a staging post for insurgents and one's mind boggles.
(J.M. Coetzee, *Life and Times of Michael K*, p. 130)
- b. 'And if I climb the fence? What will you do if I climb the fence?' 'You climb the fence and I'll shoot you, I swear to God I won't think twice, so don't try.' [...] 'You climb the fence and I'll shoot you dead, mister. No hard feelings. I'm just telling you.'
(J.M. Coetzee, *Life and Times of Michael K*, p. 85)

Second, conjunctions of NPs with declaratives, often with a negative polarity item expressing minimality (16), such as *one more* or *any*, also give rise to conditional readings (Culicover, 1970, 1972).

- (16) Bob: I'm real disappointed in you, Modesto; pullin' a gun on an old saddle pal like that.
Chico: One more word and I will kill you!
Bob: One more word, huh? Let me see if I can think of one. How about g-r-e-a-s-e-r? Greaser?
(Passage from the film *One-Eyed Jacks* (1961) by Marlon Brando)

The third and last case of conjunctions with a conditional reading are conjunctions of sufficiency-modal constructions, such as *only have to* or *it's sufficient to*, and a declarative (17).

- (17) You only have to install the MSDTC once in Cluster Administrator and MSDTC will be configured on all nodes in the cluster. You do not have to install MSDTC manually on each node.
(<http://support.microsoft.com/kb/301600/>, 21.8.2006)

In conclusion, there are indeed a number of examples for conditional conjunctions beyond PIs. This then supports part of the CH.

2.2 Semantics of conditional conjunction

Of course, the observation that there are discourse-integrating conditional readings of *and* also raises an interesting question: how can one of our prototypical coordinators

give rise to a conditional-like, i.e., a subordinate-clause-like, meaning? In particular, what do all the contexts in which *and* can get conditional readings have in common that together with a single reasonable semantic analysis of *and* the conditional readings can be explained?

In order to address this problem, Schwager (2006), who assumes and applies the thesis that imperatives denote necessity modals, proposes that the first connect contribute a necessity modal, not only for ConjPIs but also for other examples of conditional conjunctions. Necessity modals in turn denote, in simplified terms, a necessity operator $Nec(P, Q)$ that takes two propositions as arguments, a restrictor P and a domain Q , with the following obvious semantics: $Nec(P, Q) = \lambda w. (w \in P \rightarrow w \in Q)$.

Schwager now proposes that due to the (topical) intonational properties of conditional conjunctions (deaccenting of first connect and lack of a low boundary tone before *and*), the content of the first connect is not mapped onto the domain of the necessity operator, but onto its restrictor while the content of the second connect is mapped onto its domain, thus yielding a conditional reading.

However, Schwager herself notices some obvious shortcomings of this idea. First of all, it is unclear why (18a) does not get the same conditional reading as (18b).¹¹

- (18) a. You have to drink one more beer and I'll leave.
b. Drink one more beer and I'll leave.

It is moreover not entirely obvious why sufficiency modals such as (17) should be analyzed as contributing a necessity modal. Similarly, Schwager's own example (73b) of chapter 12.4, here (19), clearly contains a possibility modal.

- (19) You can even call him at MIDnight and he won't be angry.

In the light of this, the stipulation of a covert necessity operator in the first connect of, for example, generic simple present tense clauses, as in (15a), is drawn into doubt as well.

So how could we improve on the analysis? Let me sketch a very rough alternative idea. Culicover and Jackendoff (1997) proposed to account for the conditional reading of *and* in terms of a generic operator $Gen(P)(Q)$. That a generic operator can be tweaked to model conditional readings is clear: very roughly $Gen(P)(Q)$ means the same as the above necessity operator, namely that under all normal circumstances, if the restrictor P is met, Q is true.¹²

That the content of the first connect of conditional conjunctions is then mapped onto the restrictor of the generic operator can again be justified with reference to the

11. Notice that (18a) may get a different conditional reading that we are not interested in: "If you have to drink one more beer, then I'll leave."

12. Interestingly, in an entirely unrelated account, Krifka (1995), for instance, uses a generic operator with a semantics that is basically equivalent to the semantic analysis of conditional sentences as proposed, among others, by Kratzer (1991).

above-mentioned topical intonation properties. So suppose we had a satisfactory account for generic conditional conjunctions. Maybe it would not be too unlikely to assume that a metaphysical condition, i.e., a result relation of (immediate) possible future events, is just a special case of a generic condition, which relates possible events in a relevant time interval that is not restricted to the immediate future.¹³

A solution along these lines would help to explain why (18a) does not get the same conditional reading as (18b). Since we no longer have to stipulate a necessity operator hidden in the first connect, we are free to assume that the overt necessity operator in (18a) has to be part of the propositional content that enters the restrictor, if at all.¹⁴

Unfortunately however, the sketched idea does not help to account for the conditional readings of (17) and (19) either, and I will have to leave the issue as an interesting open problem for future analysis.

3. Conjunctive disjunction

There are certain standard cases of natural language disjunction that seem to have informed the notion of logical, truth-conditional disjunction. (20) is a case in point.

- (20) I don't know exactly what John did. He either went to the cinema, or he stayed at home all night.

In (20) the connects of the disjunction are epistemic alternatives to one another. The speaker commits himself to the truth of neither. This is different for a class of examples that I would like to discuss in this section, where the speaker commits himself to both connects. The speaker in (21), for instance, intuitively says two things: that coherence is required and that lack thereof has undesirable consequences.

- (21) Therefore, we must start to be coherent in our intentions or we will be indulging in fine theoretical discourses which have absolutely no substance outside this Chamber. (Europarl (en) (EU-EN), 2698860)

The discourse separating *or* as in (21) gets a speech-act conjunction reading. It is in this respect that I will speak of *conjunctive disjunctions*.¹⁵

13. If this assimilation of metaphysic conditions to generic conditions could be verified, there are hardly any cases left uncovered, because epistemic conditions ("If the gardener has not killed the baroness, then the butler has.") or speech-act related conditions ("If you're hungry, there are biscuits on the shelf.") cannot be expressed by conditional conjunctions, if only very marginal.

14. We can thus account for the fact that the only available conditional reading is the one mentioned earlier: "If you have to drink one more beer, then I'll leave."

15. An anonymous reviewer correctly remarks that my terminology may be confusing. So let me clarify: conditional conjunctions are conjunctions with a conditional reading *at content level*, whereas conjunctive disjunctions are conjunctions *at speech-act level*.

To the best of my knowledge, the fact that disjunction can get such conjunctive readings has received little, if any, attention in the literature, although this phenomenon is far from infrequent, as I will show with a multiplicity of wild examples. I would like to substantiate this claim in the following by a cartography of conjunctive disjunctions. The main aim, still, is to corroborate the CH. But, in addition to this, I think that the examples discussed in this section might be of independent interest for semantic analyses of disjunction. That is why I will go into this in some more detail.

3.1 Hypothetical conjunctive disjunctions

The most frequently occurring examples of conjunctive disjunction are, like (21), connections with expressions of necessity in the first connect. Interestingly, necessity can be expressed not only by an overt modal as in (21), but also rather indirectly as in (22):

- (22) a. The key is to keep it simple or it will not work, it will not remove the obstacles.
(Europarl (en) (EU-EN), 272055)
- b. With regard to control – as I said at the end of the speech – we propose that the report we present every Spring to Parliament should include an assessment of the sustainability element of the decisions taken. This is crucial, or we will end up with conflicting decisions.
(Europarl (en) (EU-EN), 5718224)

All of the examples in (21) and (22) are discourse separating connections: speech-act conjunctions, in analogy to our previous analysis of DisjPIs in (12). A speech-act conjunction analysis of conjunctive disjunctions is further corroborated by the examples in (23) where the first connect is an explicit performative.

- (23) a. I would therefore ask you to clarify this point, or I will not be a bearer of good news for the Italian farmers.
(Europarl (en) (EU-EN), 2637413)
- b. Mr Spencer is asking for the floor again. I would ask him not to make personal allusions or we will never finish.
(Europarl (en) (EU-EN), 18178233)

The same holds of example (24) where the speaker commits himself to some future action in the first connect and gives a reason for his preference for this course of action in the second connect.

- (24) Mr President, I shall not now echo the compliments paid to Mr Lamy or he will start to blush.
(Europarl (en) (EU-EN), 28355082)

Similar to this are cases where the speaker makes a promise in the first connect and then gives a reason why he made it:

- (25) a. No cookies, no pop-ups and no evil tracking devices, I promise. Or you can have a bite of my dinner.
(<http://absolutely-fuzzy.com/blog/?m=200406>, 16.7.2006)
- b. I will have these things judged by this weekend! Po will make me do it!!!! I promise or you can kick my butt!!!!!!
(<http://www.writersco.com/the%20Day%20Before%20The%20World%20Ends>, 16.7.2006)

As a final example, consider (26) where the first connect expresses a hope and the second connect delivers a reason for having that hope.

- (26) Senator Petten and I met quite frequently, and we would discuss the business that was to be done that week. We would then say, 'I hope to God the leaders do not find out or we will never get it done.' Therefore, do not tell them what you are planning for that week, and you will get things accomplished.
(Hansard Senate e (HANSARD_SENATE_E), 1733312)

All the examples, (11) and (21)–(26), have a particular discourse format in common: they are all conjunctive disjunctions “ X or Y ” whose first connect X presents a topic χ , which I will refer to henceforth as the χ -component (of the disjunction “ X or Y ”), as necessary, preferred or desirable. The second connect is interpreted in the context of not- χ . χ is a mere (immediate-)future possibility which is why we could speak of *hypothetical conjunctive disjunctions* here in contrast with a factual variety that will be discussed in the next section.

Crucially, the χ -component of “ X or Y ” need not be identical to the semantic content of X . It may not even be contained in or referred to explicitly in X , as example (27) makes clear.

- (27) That is enough points of order, or we will never get on to the items on the agenda.
(Europarl (en) (EU-EN), 4859513)

The χ -component of the conjunctive disjunction in (27) is the content of an indirect speech act associated with the first connect, namely that one should stop collecting more points of order. So, if we assume that α is the speech act associated with X in context, we can represent the speech-act conjunctive reading of “ X or Y ” as in (28).

- (28) $\alpha(\chi)$ & inform(“if not χ , then Y ”)

(28) gives the general discourse format of a hypothetical conjunctive disjunction. It now seems plausible that DisjPIs with their discourse format in (12) are a special case of hypothetical conjunctive disjunctions.

For hypothetical conjunctive disjunctions “ X or Y ” whose first connect X presents a not-yet-realized state or action χ as necessary, preferred or desirable, we expect that the content of the second connect Y has a negative connotation. Indeed, the preference bias noted for DisjPIs generalizes to all hypothetical conjunctive disjunctions, for a (hearer-)desirable second connect seems impossible:

- (29) ? It is necessary/preferred/desirable that this happens, or you will get my Ferrari.

This raises the question whether we also find the reversed pattern: are there hypothetical conjunctive disjunctions “X or Y” whose χ -component is presented as undesirable in X, but whose second connect Y has a positive connotation? Although conceivable in principle, this pattern does not seem to occur. Constructed examples sound decidedly odd too:

- (30) ? It is undesirable that this happens, or you will get my Ferrari.

That means that the previously attested bias puzzle in connection with DisjPIs is part of a larger whole. Hypothetical conjunctive disjunctions all present their χ -component as desirable and have a negatively connoted second connect which is interpreted as an epistemic alternative to χ , i.e., have a double preference bias.¹⁶

3.2 Factual conjunctive disjunctions

This double preference holds only for hypothetical conjunctive disjunctions. There is another class of conjunctive disjunctions where this preference bias is not present. These could be called *factual conjunctive disjunctions*, because, as we will see shortly, their χ -components refer to true, established or presupposed states of affairs. There are furthermore two kinds of factual conjunctive disjunctions: one is evaluative, the other evidential.

In *evaluative factual conjunctive disjunctions* some true state of affairs χ is presented as fortunate or unfortunate in the first connect, while the second connect states an epistemic alternative to χ which is either negative or positive. As χ is presented as a true state of affairs, the second connect usually contains a counterfactual *would*-modal. The examples in (31) present some true state of affairs χ as fortunate and give a negatively connoted counterfactual epistemic alternative.

- (31) a. “Lucky we know the Forest so well, or we might get lost,” said Rabbit half an hour later, and gave the careless laugh which you give when you know the Forest so well that you can’t get lost.
(A.A. Milne, *The House at Pooh Corner*, ‘Tigger is unbounced’)
- b.the wilderness.....remember the jumping over the drains and the endless footpath? :lol:that was fun :) yup. Luckily we did that, or we could have been walking farther away up to the Kallang Basin and Nicoll Highway! :eek:
(<http://skyscrapercity.com/archive/index.php/t-106394.html>, 16.7.2006)

16. Gómez-Txurruka (2002) also stipulated this double preference bias for readings of *or* that she called “conditional alternative”.

In contrast, the examples in (32) present some true state of affairs χ as unfortunate and give a positively connoted counterfactual epistemic alternative.

- (32) a. It is truly unfortunate that you are so far from us, or we would be weekly guests at the gallery.
(<http://www.cordair.com/accolades.htm>, 12.7.2006)
- b. Christine, it's unfortunate that their version of the Creative Commons license does not allow derivative versions to be created or we could fix this problem (and also correct their numerous misspellings and other typos).
(<http://www.foresight.org/nanodot/?p=2295>, 21.8.2006)

In all examples in (31) and (32) the second connect with its particular negative or positive connotation seems to give a reason why the state of affairs χ is fortunate or unfortunate, respectively. A preference bias, as for hypothetical conjunctive disjunctions, does not exist.

Finally, there are *evidential factual conjunctive disjunctions* such as (33) which do not involve preferences at all, but which are entirely epistemic in character.

- (33) a. It is not a very exciting topic to be discussing but, as we all know, it is very important or we would not be here.
(Europarl (en) (EU-EN), 11272804)
- b. Finally, I would also appeal to our colleagues in the national parliaments, since they apparently have little interest in the matter either, or they would be pressing their governments and raising a debate in the national parliaments on why the Member States are so perverse when it comes to taking the necessary decisions.
(Europarl (en) (EU-EN), 16403391)

Whereas in the evaluative cases, (31) and (32), the second connect gives a reason for the evaluative judgment expressed in the first, in the evidential case (33) the second connect gives a reason for the epistemic judgment that the χ -component is believed true, or at least highly probable.

The discourse format of factual conjunctive disjunctions in (34), be they evaluative or evidential, is basically the same as that of the hypothetical variant in (28).

- (34) $\alpha(\chi)$ & inform("if had not χ , then would Y ")

The only difference is that, due to the factuality of χ and evidenced by the frequent *would*-modal in the second connect, the conditional relation involved is counterfactual.

3.3 Remarks on the semantics of disjunction

The above exposition raises the question whether conjunctive disjunctions and the discourse analysis that I suggested in (28) have any relation to free-choice readings of disjunction (Ross 1941; von Wright 1968) and recent conjunctive semantics for

disjunction (Zimmermann 2000; Geurts 2005) that have been proposed to account for free-choice readings.¹⁷ Let me briefly comment.

The free-choice reading of disjunction (35a), which is present to a lesser degree also in (35b), is the conjunctive reading according to which the speaker permits that the hearer may take an apple *and* that he may take a pear (but not both).

- (35) a. You may take an apple or a pear.
b. You may take an apple or you may take a pear.

In very vague outline, this free-choice effect can indeed be conceived of as a special case of a conjunctive disjunction. The analysis of (35) according to the scheme in (28) would then be a reading in which the modal *may* gets a *performative reading* (Lewis, 1979) to the effect that a permissive speech act is given:

- (36) permit("take an apple") & inform("if you don't take an apple, you may take a pear")

We might then assume that the modal in the asserted conditional gets a performative reading too, so that the assertion in (36) becomes a conditional permission and the whole sentence comes out as a speech-act conjunction where the speaker allows the hearer to take an apple and a pear.¹⁸ Suffice it to say that it is at least not entirely implausible that the free-choice conjunctive reading of disjunction could be conceived of as a discourse separating disjunction.

However, it is widely held that the free-choice effect does not arise in all contexts, or that it can be cancelled (Kamp 1978) as in (37) in which case we get an *epistemic reading* with the modal used descriptively: the speaker does not know what is permitted (by some other source).

- (37) a. You may take an apple or a pear. But I don't know which.
b. You may take an apple or you may take a pear. But I don't know which.

Now it is interesting to see that for most, if not all, examples of conjunctive disjunction that I have given above the performative reading with its discourse format (28) is most salient, but that an epistemic reading is also available. For example, (21) could also get an epistemic reading in the vein of (20).

17. Thanks to various commentators and an anonymous reviewer for raising this issue.

18. A more complete investigation has to wait for another occasion. But let me nevertheless make two short comments: (i) Depending on the interpretation of the conditional permission we may account for the felt exclusivity that the hearer may not take both apple and pear at the same time. (ii) Notice however that this sketchy idea depends on taking the long form (35b) as basic for the free-choice effect and the short form (35a) as elliptical. This is at odds with the observation that the free-choice reading is not the preferred reading of the long form (35b).

- (21) Therefore, we must start to be coherent in our intentions or we will be indulging in fine theoretical discourses which have absolutely no substance outside this Chamber.

(Europarl (en) (EU-EN), 2698860)

In this case, the speaker of (21) would say that the true state of affairs is one out of two possible candidates: either coherence is required or the addressees will be indulging in a particular form of discourse.

It seems, then, that conjunctive disjunctions have performative readings, not only of certain modals, but also of explicit performatives (23), commitments (24), permissions (25) etc. All of these may in principle also have an epistemic reading, no matter how implausible the context would be that would give us such a reading. So the relation between free-choice disjunction, whose leading examples are permissions and obligations, and conjunctive disjunctions seems to be that the former are a special case of the latter.

Do we need a specialized semantics of disjunction as a conjunction of modalized propositions in the vein of Zimmermann (2000) or Geurts (2005)? Not necessarily, it seems.¹⁹ For the difference between the performative and the epistemic reading need not necessarily lie in the semantics of the disjunction. The difference may simply be the difference between a performative or a descriptive use of some linguistic form.²⁰

In case of a performative use of the disjunction “X or Y” we associate with X some speech-act $\alpha(\chi)$ with the content χ . It is this χ that is then filtered out as the epistemic content of the speech-act $\alpha(\chi)$ and taken up by the disjunction. In contrast to this, in case of a descriptive reading of the disjunction “X or Y” the whole propositional content of X is the epistemic unit that the disjunction is sensitive to. It is then perhaps not too far-fetched to assume that in both performative and descriptive readings of a disjunction “X or Y” the semantics of the disjunction are the exact same, only that different propositions are considered the epistemic content of the first connect, depending on its use. So for a performative reading of X in “X or Y” we get (38a), while for a descriptive reading of X in “X or Y” we may get (38b).

- (38) a. $\alpha(\chi)$ & inform(“ χ or Y”)
b. inform(“X or Y”)

This behavior of *or* is plausible, if we think of it as a connector of epistemic possibilities: disjunction seems sensitive to the epistemic minimal unit (cf. Pasch et al. 2003) of the first connect.²¹

19. In fact, it is hard to conceive how such an approach could deal with (27) where the χ -component is not even mentioned in the first connect.

20. Whether an expression is interpreted as being used performatively or descriptively may very well be a matter of whether the speaker is taken to be competent or not (cf. Zimmermann, 2000).

21. We are now in a position to explain the relation between *or* and *otherwise*: *or* may only refer to the epistemic minimal unit of the first connect, whereas *otherwise* has much wider

3.4 Embedded conjunctive disjunctions

Let us finally note a set of examples that slightly complicate the picture sketched so far. An analysis of conjunctive disjunctions as discourse separating connections, i.e., as speech-act conjunctions, seems very plausible for all examples discussed. If correct, examples of embedded conjunctive disjunctions will require special scrutiny.

- (39) a. They are there, threatening campesinos that they must plant coca or they will die.
(Europarl (en) (EU-EN), 7760017)
- b. Aerie forces you to tell her you love her or the romance is over.
(<http://www.gamebanshee.com/baldursgateii/npcs/aerie.php>, 26.6.2006)
- c. That person showed me a letter from a banking institution asking for additional guarantees or the institution would demand full payment of its loan within 48 hours.
(Hansard House e (HANSARD_HOUSE_E), 8151944)

To account for embedded occurrences of conjunctive disjunctions the notion of discourse separation simply has to encompass reported speech.

3.5 Intermediate summary

In conclusion, conjunctive disjunctions are a highly interesting topic with a lot of challenges for semantics which are beyond the scope of this paper. At present our main concern is still the PoPA. This section tried to corroborate the part of the CH that claimed that there are discourse-separating disjunctions, by providing a wide range of parallel cases of conjunctive disjunctions.

4. The Generic Challenge

4.1 The problem of generic DisjPIs

So far we have made plausible an account of the PoPA based on the CH by pointing out that conditional conjunctions and conjunctive disjunctions are phenomena that go well beyond PIs. We should therefore accept the claim that some ConjPIs are conditional conjunctions and that some DisjPIs are conjunctive disjunctions. What is left to argue is that all DisjPIs are conditional disjunctions.

anaphoric possibilities. This is shown nicely by the following examples from Webber et al. (2003):

- i. a. If the light is red, stop, otherwise you might get hurt.
b. If the light is red, stop, or you might get hurt.
- ii. a. If the light is red, stop, otherwise you may proceed.
b. ? If the light is red, stop, or you may proceed.

I have already indicated that this might not be clear for generic DisjPIs (13), repeated here for convenience:

- (13) a. Working for a successful start-up is no fun. The atmosphere is so tensed.
 Agree to everything he says, or your boss fires you immediately.
 b. Speak at least six languages or you are not a cosmopolitan.

The problem with generic DisjPIs is that it is not entirely clear what discourse format generic DisjPIs have, in particular whether they are discourse separating connections or not. Intuitively, we would probably like to conceive of them as one communicative event, but then not as a statement with mere conditional content, but rather as a single goal-oriented directive that presents something as necessary or required for a particular purpose. But if generic DisjPIs are to be interpreted as one communicative event only, albeit some sort of informative directive, this contradicts the CH in its present formulation which claimed that all DisjPIs are discourse separating connections.

In order to decide the question whether generic DisjPIs are discourse separating or not, it does not suffice to rely on intuition alone. Therefore I would like to consider evidence for and against semantic subordination in conditional conjunctions and conjunctive disjunctions that was proposed by Culicover and Jackendoff (1997). I will extend their discussion with special emphasis on generic DisjPIs, but conclude that the evidence is not decisive.

4.2 Pseudo-coordination vs. asymmetric coordination

Since we are in doubt whether all occurrences of DisjPIs are discourse separating, we should not speak of conjunctive disjunctions when referring to all of them. So, let us call the use of *or* in all DisjPIs and other clear cases of conjunctive disjunction more generally ‘*explanation-or*’.

Culicover and Jackendoff (1997) argue that conditional conjunctions are pseudo-coordinate, i.e., coordinate in syntax, but subordinate in conceptual structure, while *explanation-or* is, though asymmetric, coordinate on both levels of analysis. Two arguments are given for why conditional conjunction is a subordination in semantics, but *explanation-or* is not. These two arguments rest on observations concerning NPI-licensing (see section 4.2.1) and the possibility of cataphoric binding by quantifiers across connects (see section 4.2.2), respectively.²²

22. Culicover and Jackendoff assume that if a connection behaves like a conditional with respect to NPI-licensing and cataphoric binding, then this is an argument for it being a case of subordination semantically. It is a further step to take conditional-likeness as evidence for discourse integration, but this is what I will do. If this further step is incorrect, so much the better for the Connector Hypothesis.

4.2.1 NPI-licensing

The first argument for semantically subordinate *and*, but coordinate *or* in PIs is that only the former allows negative polarity items (NPIs) in the first connect. (40) is Culicover and Jackendoff's (53c).

- (40) Say anything and/*or I'll call the police.

As conditionals quite clearly allow NPIs in their *if*-clauses, Culicover and Jackendoff argue that this parallel is evidence for subordination in case of conditional conjunction and for coordination in case of explanation-*or*.

However, the impossibility of NPIs in the first connect of explanation-*or* is *not* an argument against subordination. This is so, because the parallel in NPI-licensing behavior between conditionals and PIs is actually more complicated than suggested by Culicover and Jackendoff's argument (cf. Lawler, 1975). NPIs are licensed in ConjPIs only if the imperative connect gets a negative *or*, to some minor extent, a generic interpretation. This then is entirely parallel to the NPI-licensing in the *if*-clauses of the corresponding conditionals, as evidenced in (41) and (42).

- (41) a. If you say anything to anyone about this, I'll kill you.
b. Say anything to anyone about this and I'll kill you.
(42) a. ?If you say anything to anyone about this, I will give you my Ferrari.
b. ?Say anything to anyone about this and I will give you my Ferrari.

The crucial point here is that not all conditionals license NPIs in their *if*-clause. This was observed by Lakoff (1970) who gave the contrast pair in (43), which shows how NPI-licensing has a pragmatic dimension and is susceptible to the kind of argument that is being made with the assertion of a conditional.

- (43) a. If you eat any loxo, I'll {batter you / ??give you whatever you like}.
b. If you eat some loxo, I'll {?batter you / give you whatever you like}.

But then, if there are conditionals which do not license NPIs in their *if*-clauses due to some rhetorical effect of NPIs, then the impossibility of NPIs in the first connect of explanation-*or*-connections should not be an argument against subordination, unless one were willing to claim that also certain conditionals are not subordinate in semantics. Rather, NPI-licensing should be dismissed as a criterion for semantic subordination for these reasons, or should at least not be counted as an argument against a subordination in the semantics of explanation-*or*-connections.

4.2.2 Cataphoric binding

Culicover and Jackendoff (1997, pp. 203 – 4) present interesting binding data to support the idea that conditional conjunction is subordinating in conceptual structure, while explanation-*or* is not. They observe that conditional conjunction allows for cataphoric binding by a quantifier phrase with *every* across the connects, just as conditionals do (44a), but that apparently explanation-*or* does not (44b) (=53b) in Culicover and Jackendoff 1997).

- (44) a. If you give him_i enough bribes, every senator_i will vote for the president's proposal.
 b. Give him_i enough bribes and/*or every senator_i will vote for the president's proposal.

Possibilities of cataphoric binding by quantifiers across connects might *prima facie* seem like a genuine test for subordinateness, but there is room for doubt that this is so. Although the *or*-variant of sentence (44b) seems odd, especially after having read the *and*-variant, this might be due to quite different reasons. Very likely we are inclined to assume by default that senators need to be bribed to vote *for* the president's proposal, not *against*. This scenario is made salient by the *and*-variant of (44b), but renders the *or*-variant of (44b) unintelligible. In contrast to that, there are other examples of explanation-*or* with cataphoric binding across connects where little doubt about their acceptability arises. Drawing on juvenile gender stereotypes, for instance, (45a) was judged acceptable by 7 out of 9 informants, marked by 2, while no one found it entirely unacceptable on a scale including 'acceptable', 'odd', 'marked' and 'unacceptable'. This was, *nota bene*, the exact same distribution as that obtained for the conditional sentence in (45b).

- (45) a. Tell her_i every now and then that you love her_p, or every girl_i will leave you sooner or later.
 b. If you don't tell her_i every now and then that you love her_p, every girl_i will leave you sooner or later.

From this we should conclude, *contra* Culicover and Jackendoff, that at least under certain circumstances cataphoric binding by quantifiers across disjuncts is possible.

As a matter of unfortunate fact, the situation is, as usual, far more complicated. Cataphoric binding possibilities seem to depend crucially on the kind of modality that is at stake. Unlike the examples in (45) where a generic relationship is expressed, examples (46) relate to the concrete future course of events, i.e., they express a metaphysical conditional relationship. The striking observation is that although 7 out of 9 informants found the conditional (46b) acceptable or odd, 7 out of 9 informants found the DisjPI (46a) marked or unacceptable.

- (46) a. Invite her_p, or every girl_i from our rugby team will feel neglected.
 b. If you don't invite her_p, every girl_i from our rugby team will feel neglected.

Moreover, in the group of 7 informants who found (46b) acceptable or odd, 5 found it odd. This means that there is an acceptability contrast not only between DisjPIs and conditionals in case of metaphysical modality, but also between generic and metaphysical variants of either sentence.

One possible conclusion to be drawn from all this is that we have to be careful with Culicover and Jackendoff's second test for subordination, as judgments seem to depend on a variety of factors, such as default expectations and the kind of conditional relationship that is expressed. Yet if we were to hold on to the test, which had some *prima facie*

plausibility on its side, another possible conclusion is that there are some conditional-like, subordinate instances of DisjPIs, namely those that express a generic idea.

4.3 The Connector Hypothesis revisited

Shortly, I will leave the matter whether generic DisjPIs refute the CH undecided. But suppose that generic DisjPIs are not discourse separating connections. If we nevertheless wanted to account for the PoPA, we could resort to a weaker formulation of the CH which includes the possibility of discourse integrating DisjPIs. We could then try to defend that such discourse integrating DisjPIs are not merely unbiased conditional statements, but rather a conventionalized way of expressing purpose-related necessity. This would still explain the preference bias and accord with intuition. But unfortunately, this weaker hypothesis could no longer be made plausible by parallel uses of *or* alone. In its defense we would have to find support for the claim that if a disjunction communicates a conditional relationship it communicates purpose-related necessity.

In conclusion, if we accept that there are discourse integrating, conditional-like uses of disjunction, like generic DisjPIs, the PoPA is replaced by a different problem, namely *the problem of conditional disjunctions*: why do generic DisjPIs express purpose-related necessity only and not also unbiased conditional relationships? Seen in this light, the CH is a possible explanation with independent evidence for the bulk of cases that fall under the PoPA but also gives rise to an interesting, more refined, follow-up problem.

5. Conclusion

This paper addressed PIs as sentential connections and presented their diverse discourse formats in detail. The Connector Hypothesis was advanced as the basis of a possible solution to the Problem of Pragmatic Asymmetry.

In support of the CH, PIs were shown to be embedded in a broader context of non-standard conjunctions and disjunctions. Conditional conjunctions and conjunctive disjunctions presented themselves as overarching hitherto neglected linguistic troublemakers with their own respective semantic and pragmatic challenges. This paper contributed an in-depth classification of conjunctive disjunctions and showed that the PoPA too is part of a larger whole, as all hypothetical DisjPIs display a double preference bias.

Doubts about the generality of the CH finally arose from generic DisjPIs. These examples appeared, contrary to the CH, discourse integrating connections with just one informative communicative event. I concluded that if generic DisjPIs were indeed discourse integrating, this would diminish the explanatory scope of the CH, but it would also leave us with a new, smaller and more concrete explanandum which we might hope is easier to account for than the one we started out with.

References

- Asher, Nicholas & Lascarides, Alex (2003). *Logics of Conversation*. Cambridge: CUP.
- van der Auwera, Johan. 1986. Conditionals and speech acts. In *On Conditionals*, Elizabeth Closs Traugott, Alice ter Meulen, Judith Schnitzer Reilly & Charles A. Ferguson (eds), 197–214. Cambridge: CUP.
- Bolinger, Dwight. 1979. Is the imperative an infinitive? In *Meaning and Form*, Dwight Bolinger (ed.), 152–182. London: Longman.
- Clark, Billy. 1993. Relevance and 'pseudo-imperatives'. *Linguistics and Philosophy* 16: 79–121.
- Culicover, Peter W. 1970. One more can of beer. *Linguistic Inquiry* 1: 366–369.
- Culicover, Peter W. 1972. OM-sentences. *Foundations of Language* 8: 199–236.
- Culicover, Peter W. & Jackendoff, Ray. 1997. Semantic subordination despite syntactic coordination. *Linguistic Inquiry* 28(2): 195–217.
- Franke, Michael. 2005a. How and how not to employ discourse relations to account for pseudo-imperatives. In *Proceedings of the 15th Amsterdam Colloquium*, Paul Dekker & Michael Franke (eds), 83–88. Amsterdam: ILLC.
- Franke, Michael. 2005b. Pseudo-imperatives. MA thesis, Universiteit van Amsterdam.
- Geurts, Bart. 2005. Entertaining alternatives: Disjunctions as modals. *Natural Language Semantics* 13: 383–410.
- Gómez-Txurruka, Isabel. 2002. The semantics of natural language disjunction *or*. Ms, ILCLI Donostia-San Sebastián.
- Han, Chung-Hye. 1998. The Structure and Interpretation of Imperatives. PhD dissertation, University of Pennsylvania.
- Kamp, Hans. 1978. Semantics versus pragmatics. In *Formal Semantics and Pragmatics for Natural Languages*, Franz Guenther & Siegfried Josef Schmidt (eds), 255–287. Dordrecht: Reidel.
- Kratzer, Angelika. 1991. Modality. In *Semantik: Ein internationales Handbuch der zeitgenössischen Forschung*, Arnim von Stechow & Dieter Wunderlich (eds), 639–650. Berlin: Walter de Gruyter.
- Krifka, Manfred. 1995. Focus and the interpretation of generic sentences. In *The Generic Book*, Gregory Norman Carlson & Francis Jeffrey Pelletier, (eds), 238–264. Chicago IL: Chicago University Press.
- Lakoff, Robin. 1970. Some reasons why there can't be any some-any rule. *Language* 45: 608–615.
- Lawler, John M. 1975. Elliptical conditionals and/or hyperbolic imperatives: some remarks on the inherent inadequacy of derivations. In *Papers from the 11th Regional Meeting. Chicago Linguistic Society*, 371–382, Chigaco Linguistic Society.
- Lewis, David. 1979. A problem about permission. In *Essays in the Honor of Jaakko Hintikka*, Esa Saarinen, Risto Hilpinen, Ilkka Niinluoto & Merrill Provence Hintikka (eds), 163–175. Dordrecht: Reidel.
- Mann, William C. & Thompson, Sandra A. 1987. Rhetorical structure theory: A framework for the analysis of text. *IPRA Paper in Pragmatics*, 1: 79–102.
- Pasch, Renate, Brauße, Ursula, Breindl, Eva & Waner, Ulrich Herman. 2003. *Handbuch der deutschen Konnektoren*. Berlin: de Gruyter.
- Roberts, Craige. 1989. Modal subordination and pronominal anaphora in discourse. *Linguistics and Philosophy* 12: 683–721.
- Ross, Alf. 1941. Imperatives and logic. *Theoria* 25(7): 53–71.

- Russell, Benjamin. 2007. Imperatives in conditional conjunction. To appear in *Natural Language Semantics*.
- Schwager, Magdalena. 2006. Interpreting Imperatives. PhD dissertation, Johann-Wolfgang-Goethe Universität zu Frankfurt am Main.
- von Wright, Georg Henrik. 1968. *An Essay on Deontic Logic and the Theory of Action*. Amsterdam: North-Holland.
- Webber, Bonnie, Stone, Matthew, Joshi, Aravind & Knott, Alistair. 2003. Anaphora and discourse structure. *Computational Linguistics* 29(4): 545–587.
- Zimmermann, Thomas Ede. 2000. Free choice disjunction and epistemic possibility. *Natural Language Semantics* 8: 255–290.

UNCORRECTED PROOFS
© JOHN BENJAMINS PUBLISHING COMPANY