

# Minimizers in conditional threats and promises<sup>1</sup>

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**Abstract.** Minimizer NPIs are famously licensed in conditional threats, but not promises. In this paper I show that this content-sensitivity is pragmatically motivated, independent of NPI licensing: minimizers are licensed in all types of conditionals. However, in most contexts it is not in the speaker's best interest (and therefore irrational) to use a minimizer when making a promise, rendering such promises odd.

**Keywords:** Minimizer NPIs, conditionals, threats, promises, game theory.

## 1. Introduction

Many studies of negative polarity items (NPIs) focus on *any* and *ever* and their equivalents in other languages. In this paper, I focus on minimizer NPIs like *drink a drop*, *lift a finger* and *make a peep*. In particular, I discuss their distribution in conditionals: minimizers are licensed in 'neutral' conditionals and conditional threats as in (1) and (2), but they are usually odd in conditional promises as in (3).<sup>2</sup>

- |     |   |         |
|-----|---|---------|
| (1) | a. If John <i>drinks a drop</i> , I will be very surprised.                 | NEUTRAL |
|     | b. If Alex <i>lifts a finger</i> , Lee will be happy.                       |         |
|     | c. If Jesse <i>makes a peep</i> , Kim will lose the bet.                    |         |
| (2) | a. If John <i>drinks a drop</i> , I will punch him.                         | THREAT  |
|     | b. If Alex <i>lifts a finger</i> to help Mary, I will make him rue the day. |         |
|     | c. If Jesse <i>makes a peep</i> , I will tear his head off.                 |         |
| (3) | a. ??If John <i>drinks a drop</i> , I will kiss him.                        | PROMISE |
|     | b. ??If Alex <i>lifts a finger</i> , I will cook him dinner.                |         |
|     | c. ??If Jesse <i>makes a peep</i> , I will pay him \$5,000.                 |         |

This observation is not new; in fact it has been around since Lakoff (1969), but it has remained a puzzle for existing theories of NPI licensing. I propose a pragmatic solution to the puzzle in this paper: I show that it is often irrational for the speaker to use a minimizer when making a promise. This, rather than an inability of promises to license minimizers, is what causes sentences like (3)

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<sup>2</sup>A brief note on terminology: I use the term *neutral conditional* to differentiate between conditionals which merely state a causal (or relevance) relationship between antecedent and consequent, and those which express a promise or a threat.

to be odd.

While the data presented in this paper focuses on hypothetical conditionals, it is important to note that the same generalizations hold for relevance conditionals. The mechanism I propose below also works for relevance conditionals. (I am agnostic as to whether we can assume the same semantics for hypothetical and relevance conditionals (cf. Franke 2009 who proposes to give them the same syntax and semantics, and Iatridou 1991 who assumes a different syntax and semantics).) Consider the following examples adapted from Csipak (2010).

- (4) a. *Wenn Alex einen Funken Verstand hat, das Angebot ist super!*  
 if Alex a spark intelligence has that offer is great  
 ‘If Alex has a spark of intelligence, that is a great offer.’ NEUTRAL
- b. *Wenn du einen Ton sagst, ich habe eine Pistole.*  
 if you one tone say I have a gun  
 ‘If you make a peep, I have a gun.’ THREAT
- c. <sup>??</sup>*Wenn du einen Tropfen trinken willst, ich habe Bier in der Küche*  
 if you a drop drink want I have beer in the kitchen  
*intended:* ‘If you want to drink a drop, I have beer in the kitchen.’ PROMISE

The remainder of the paper is organized as follows: in section two, I present the relevant conditional data and introduce the two main strands of theories of NPI licensing; showing that neither can account for the puzzle of conditional promises. In section three, I give a game-theoretic rendering of threats and promises. Section four shows how a game-theoretic approach to threats and promises can explain why minimizers are good in threats, but odd in promises. Section five concludes the paper.

## 2. NPI licensing

What makes NPIs special is that they can only occur in special environments – for example under *n*-words like *no one* (as in (5a)), but not in standard ‘positive’ assertions (as in (5b)).<sup>3</sup>

- (5) a. No one has *ever* heard of minimizers.  
 b. <sup>??</sup>Alex has *ever* heard of minimizers.

It is well-known that not all NPIs are licensed under all licensors – while so-called ‘weak’ NPIs like *any* and *ever* are licensed under a large number of licensors (such as clausemate negation,

<sup>3</sup>I use <sup>??</sup> to indicate that a particular sentence is odd, and I do not distinguish between ungrammaticality, infelicity or being odd for other reasons.

comparatives, the antecedents of conditionals, the scope of *only*,...), ‘strong’ NPIs like *in weeks* are only licensed in a small subset of these licensers (they are licensed in clausemate negation, for example, but not in the antecedent of a conditional).

Consider the well-behaved weak NPI *ever* and strong NPI *in weeks* and their licensing behaviour in conditionals. Note that while *ever* is acceptable in all three types of conditionals (in (6)), *in weeks* is not acceptable in any of them (seen in (7)). But crucially they behave uniformly across different types of conditionals.

- |     |    |  |         |
|-----|----|--|---------|
| (6) | a. | If John <i>ever</i> drinks alcohol, I will be surprised.       | NEUTRAL |
|     | b. | If John <i>ever</i> drinks alcohol, I will punch him.          | THREAT  |
|     | c. | If John <i>ever</i> drinks alcohol, I will kiss him.           | PROMISE |
| (7) | a. | ?If John drinks alcohol <i>in weeks</i> , I will be surprised. | NEUTRAL |
|     | b. | ?If John drinks alcohol <i>in weeks</i> , I will punch him.    | THREAT  |
|     | c. | ?If John drinks alcohol <i>in weeks</i> , I will kiss him.     | PROMISE |

We can say that the antecedent of a conditional is a licenser for weak NPIs like *ever*, but not for strong NPIs like *in weeks*. Now remember the pattern we observed for the minimizers *drink a drop*, *lift a finger* and *make a peep*, seen in (1), (2), and (3). It differs from both the pattern of weak NPIs and that of strong NPIs: minimizers are acceptable in neutral conditionals and threats, but odd in promises. This poses a problem – it seems we can neither claim that minimizers *are* licensed in the antecedents of conditionals, nor that they are not. In other words, minimizers like *drink a drop* are *content-sensitive*: whether they are licensed or not depends on the *content* of the conditional.

In order to understand what is going on, we first need to take a closer look at what minimizers actually are. They are NPIs that denote the (minimal) endpoint of some contextually salient scale. For example *drink a drop* is the smallest amount a person can drink; *lift a finger* is the smallest amount a person can help; *make a peep* is the smallest amount a person can draw attention to themselves; etc. There is no consensus over whether they generally count as ‘weak’ or ‘strong’: while Krifka (1995) and Chierchia (2013) argue that they are emphatic and therefore strong, Gajewski (2008) and Hoeksema (2002) show that their distribution is wider than that of strong NPIs like *in weeks*, which suggests that they are more similar to weak NPIs.

In the remainder of this section, I present the two main strands of NPI licensing theories: a syntactic-semantic one following Ladusaw (1979) who suggests that NPIs need to occur in the scope of a downward-entailing operator in order to be licensed, and a pragmatic one following Fauconnier (1975). On this view, NPIs give rise to alternatives and must be more informative than their alternatives in the context they occur in.

## 2.1. Downward-Entailingness

One of the two broad categories of NPI licensing theories is a syntactic-semantic one: NPIs must occur in the scope of a licensing operator. Different accounts differ as to what the nature of this operator is and how exactly the mechanism works, but they share the common move in the analysis that the NPI needs to occur in the operator's scope. I show that this move is what is problematic for the conditional data, and therefore I do not go into detail about what the different implementations of the syntactic-semantic account are. I briefly introduce the original proposal by Ladusaw and three modifications.

Ladusaw (1979) proposes that NPIs are licensed in the scope of a downward-entailing operator. Downward-entailing operators are operators under which the entailment between sets and their subsets is reversed (being a part of a subset entails being part of its superset, and under a downward-entailing operator being part of the superset entails being part of the subset). This proposal accounts for NPIs being licensed under a surprisingly wide number of contexts – clausemate negation is downward-entailing, but so is the scope of *few* and a number of other contexts which are not 'negative' in any obvious way.

- (8)  $f$  is downward-entailing iff  
 $X \subseteq Y \Rightarrow f(Y) \subseteq f(X)$
- (9) a. broccoli  $\subseteq$  vegetables  
 b. Alex doesn't like vegetables.  $\subseteq$   
 Alex doesn't like broccoli.  
 c. Few people like vegetables.  $\subseteq$   
 Few people like broccoli.
- (10) a.  $\checkmark$  Alex doesn't like *any* vegetables.  
 b.  $\checkmark$  Few people like *any* vegetables.

Note that downward-entailingness is a logical property of operators like *few*: either the operator has it, or not. Being downward-entailing does not depend on factors like context or, as needed to solve the conditional puzzle, *content*.

Several improvements have been proposed to fine-tune Ladusaw's original account. For example, Zwarts (1998) attempts to explain the difference between weak NPIs like *ever* and strong NPIs like *in weeks* in terms of an additional licensing property: some downward-entailing operators have an additional logical property, anti-additivity. These operators are 'stronger' licensors: strong NPIs need to occur in the scope of an operator that is anti-additive, not just downward-entailing.

A different problem has been tackled by von Stechow (1999): some operators which license NPIs are not straightforwardly downward-entailing. But von Stechow shows that these are Strawson-downward-entailing – once the presuppositions of the ‘entailed’ proposition are fulfilled, it is in fact entailed.

In a series of works, Giannakidou (cf. e.g. Giannakidou 1998, Giannakidou 2006, Giannakidou 2010) develops a different syntactic-semantic licensing mechanism. The property she proposes is responsible for NPI licensing is (non-)veridicality:

- (11) An operator  $F$  is veridical iff  $F(p)$  entails or presupposes that  $p$  is true in some individual’s epistemic model; otherwise  $F$  is nonveridical. (Giannakidou 2006: 589)

All of these improvements on Ladusaw’s original theory maintain the basic premise that NPIs have to appear in the scope of an operator which has a certain logical property. Once an operator is established to possess that property, and a given NPI is established to be licensed in its scope, nothing in these theories predicts the kind of content-sensitivity observed in (1) – (3). Since minimizers are acceptable in the antecedent of a neutral conditional (cf. (1)), syntactic-semantic theories of NPI licensing predict them to be licensed in *all* antecedents of conditionals, regardless of whether these express a neutral relation between antecedent and consequent, or a promise or a threat.

## 2.2. Pragmatic scales

The second major category of NPI licensing theories aims to explain NPI licensing pragmatically: following a proposal by Fauconnier (1975), there have been a number of proposals that assume that NPIs trigger alternatives on a contextually salient scale (cf. e.g. Krifka 1995, Eckardt 2005, Chierchia 2013). The core idea common to all of these proposals is that an NPI denotes the endpoint of a scale, and that by using the NPI, the speaker is making a stronger statement than by using an alternative value from the relevant scale (often the ‘strength’ of assertions is measured in terms of entailment<sup>4</sup>).

Consider for example the minimizer *drink a drop*. The relevant scale is one of amounts of (alcoholic) beverages someone consumes. Both Eckardt (2005) and Chierchia (2013) paraphrase the meaning of *drink a drop* as ‘drinking an amount so small that it does not count/is impossible to drink only that much and no more’; the minimal endpoint of the scale of drinking. Below is a Chierchia-style lexical entry for the minimizer *drink a drop*.

<sup>4</sup>van Rooij (2003) discusses how entropy and relevance can be used to measure ‘strength’ in questions.

- (12) a.  $\llbracket \text{drink a drop} \rrbracket^w = \lambda x \exists s [\text{drink}_w(s, x, d_{min})]$   
 b.  $\text{ALT}(\text{drink a drop}) = \{ \lambda x \exists s [\text{drink}(s, x, d'): d' > d_{min}] \}$

Consider a context where there is a party tonight, and it is well-known that Alex does not like alcohol. In such a context, a speaker can express her beliefs about whether Alex will drink or not by using a conditional.

- (13) a. If Alex *drinks a drop* at the party I will be very surprised.  $\subseteq$   
 b. If Alex *drinks two beers* at the party, I will be very surprised.

The conditional containing the minimizer *drink a drop* entails the one containing the alternative *drink two beers*; this means that the first is a ‘stronger’ proposition in the relevant sense. According to the pragmatic theories of NPI licensing, the minimizer should therefore be licensed here (which in fact it is, cf. (13a)).

Note that there is nothing in the pragmatic theories of NPI licensing which would predict *content-sensitivity*. As long as the proposition containing the minimizer is ‘stronger’ than its alternatives, NPIs are predicted to be licensed, independently of the content.

I have shown that both main theories of NPI licensing cannot predict that minimizers are sensitive to content when they occur in the antecedent of a conditional. I will now discuss some game-theoretic insights into the nature of threats and promises before I use these insights for explaining the content-sensitivity of minimizers.

### 3. Psycholinguistic and game-theoretic insights into threats and promises

Game theory models the decisions and preferences of agents who are interacting with each other. Each agent has preferences about the outcome of the interaction, and game theory is a good way to model at each point of the interaction which utterance promises the greatest payoff for the speaker (i.e. comes closest to her preferred outcome).

Both promises and threats are used in order to bring about certain behaviours of the addressee (Searle 1998), and both are often expressed in conditional form. Game theorists have attempted to describe when a promise or a threat is *effective*; that is when a situation in which a promise or threat was uttered is resolved in such a way that the speaker (and ideally the hearer as well) gets what she wants. Three key components are necessary: both promises and threats need to be *credible*, *beneficial* and *efficacious* (see below; cf. Klein and O’Flaherty 1993). If one of these is

missing, the threat or promise cannot be uttered felicitously.

But there is also a striking difference between threats and promises: they affect the speaker's public commitments in different ways. While the speaker is not entering in a commitment when making a threat, she does when making a promise. Both the hearer and the public can *demand* that she honour her promise, but they cannot in the same way demand that she deal a punishment (cf. Schelling 1960, Searle and Vanderveken 1985 and experimental evidence in Verbrugge et al. 2004). From a game-theoretic perspective, we can describe this pattern (obligation to pay a reward that is part of a promise, but no obligation attached to a threat) as saying that for the speaker *threats are cheap; promises are costly*.

Before presenting my analysis for minimizers in threats and promises, I introduce some game-theoretic insights on the notions of *benefit* and *efficacy* which illustrate what makes a promise or a threat effective (i.e., induces the hearer to show the behaviour desired by the speaker). I ignore the question of when a promise or a threat is *credible*, which is a separate issue. I simply assume that the speaker's threats and promises are credible – she is taken to be in a position where she can pay the promised reward or deal the threatened punishment.<sup>5</sup>

Consider first the case of promises. When is a promise effective? Both speaker and hearer must get what they want. From the point of view of the speaker, getting the addressee to show the desired behaviour must be worth *more* than paying the reward (this makes the promise *beneficial* to the speaker). From the point of view of the hearer, getting the reward must be worth *more* than showing the desired behaviour (this makes the promise *efficacious* for the hearer). The table below models the preferences of the speaker and the hearer. Doing something that does not benefit oneself directly is modeled by a negative value (the 'cost' one has), whereas getting something one wants is modeled by a positive value.

Consider a scenario where the speaker wants to tease the hearer. Clamato is a tomato-flavoured beverage which contains clam broth; something that the hearer may not drink voluntarily. The speaker can make the promise in (14), which we can model as in the table below. The values assigned in the cells are supposed to illustrate the agents' costs and benefits. We consider the exchange to be a one-off, i.e. we ignore any previous interactions the interlocutors may be aware of which might complicate the model, and we also ignore the possibility of any future interactions.

(14) If you drink this Clamato, I will cook you dinner.

<sup>5</sup>For experimental work on what makes promises and threats credible, see Lopez-Rousseau et al. (2011) and references therein.

	drink Clamato	dinner
speaker cost	–	-5
speaker benefit	10	–
<b>speaker net gain: 5</b>		

	drink Clamato	dinner
hearer cost	-5	–
hearer efficacy	–	8
<b>hearer net gain: 3</b>		

In this example, for the speaker the benefit of watching the hearer drink Clamato is high enough to offset the cost of making dinner, and the hearer's efficacy of getting dinner also offsets the cost of drinking Clamato. Because the promise is beneficial for the speaker, it is rational for her to utter it.

Now consider a threat. In order to induce a hearer to show the desired behaviour, it must be more attractive for him to avoid punishment than to behave against the speaker's wishes. The speaker herself has little to no cost since she is not obligated to do anything (remember that *threats are cheap*). Therefore, any threat is beneficial for the speaker; whether it will be effective in bringing about the desired hearer behaviour is only a question of whether it is credible and efficacious. We consider a threat to be efficacious if the pleasure drawn from going against the speaker's wishes (in the example below, getting drunk) is *lower* than the 'cost' associated with being punished.

(15) If you get drunk, you have to sleep on the couch.

	drunk	couch
speaker cost	–	0
speaker benefit	–	–
<b>speaker net gain: 0</b>		

	drunk	couch
hearer cost	–	-8
hearer pleasure	5	–
<b>hearer net gain: -3</b>		

There are two important things to note here: first, the hearer has a 'negative' gain. The pleasure of getting drunk is lower than the discomfort of having to sleep on the couch. This means it is efficacious for the hearer to comply with the speaker's wishes. Modeling the speaker's benefits is more difficult. Note first that the speaker has no costs (threats are cheap). The benefit comes about indirectly: since the speaker does *not* want the hearer to get drunk, we need to consider the conditional strengthening of the threat.

(16) If you don't get drunk, you don't have to sleep on the couch.

Here, the corresponding table easily models the speaker's benefit.

	not drunk	not couch
speaker cost	–	0
speaker benefit	8	–
<b>speaker net gain: 8</b>		

Notice again that there is no associated cost for the speaker: *not* forcing the hearer to sleep on the couch is ‘free’. Making the move from the conditional threat to the conditionally strengthened threat has been shown experimentally to occur regularly in discourse (cf. Fillenbaum 1976 and more recently Guerini and Castelfranchi 2006).

In this section I have shown that for promises to be beneficial to the speaker, they need to be ‘cost-effective’. Threats, on the other hand, are free for the speaker, which means they are always beneficial.

#### 4. The analysis

I propose that the reason why minimizer NPIs are acceptable in conditional threats, but not promises, has nothing to do with their licensing. In principle they are perfectly licensed in the antecedents of all conditionals, regardless of content – just as both theories of NPI licensing discussed above predict for weak NPIs. The reason that they are often odd in promises is because it is often *irrational* for the speaker to make a promise that contains a minimizer.

##### 4.1. Threats

Remember the pragmatic theory of NPI licensing which analyzes minimizers as giving rise to alternatives on a contextually salient scale, with the minimizer itself denoting the endpoint of that scale. In the case of *drink a drop*, this is a scale of amounts of (alcoholic) beverages consumed. Drinking *a drop* is the minimal endpoint, with alternatives like drinking *a glass* or *a bottle*. When a minimizer is used in the antecedent of a conditional, the speaker is making the *strongest possible* threat; threats containing alternative values of the scale are entailed. Consider the following scenario: the speaker does not like it when the hearer drinks alcohol because he is the designated driver. She can felicitously express a threat containing a minimizer.

- (17) a. If you drink *a drop* of wine tonight, you have to sleep on the couch.  $\subseteq$   
 b. If you drink *a bottle* of wine tonight, you have to sleep on the couch.

	drink a drop	couch
speaker cost	–	0
speaker benefit	–	–
<b>speaker net gain: 0</b>		
	drink a bottle	couch
speaker cost	–	0
speaker benefit	–	–
<b>speaker net gain: 0</b>		

	drink a drop	couch
hearer cost	–	-8
hearer efficacy	2	–
<b>hearer net gain: -6</b>		
	drink a bottle	couch
hearer cost	–	-8
hearer efficacy	2	–
<b>hearer net gain: -6</b>		

Like in the threat discussed in the previous section (cf. (15)), the hearer faces negative consequences if he chooses to drink alcohol: the pleasure of drinking (regardless of the amount) does not offset the cost of sleeping on the couch. Therefore it is efficacious for the hearer to behave according to the speaker's wishes. As before, both threats are free of cost for the speaker. As before, it is easier to see the benefit for the speaker by looking at the conditionally strengthened threat.

- (18) a. If you don't drink a drop of wine tonight, you don't have to sleep on the couch.  
 b. If you don't drink a bottle of wine tonight, you don't have to sleep on the couch.

	not drink a drop	not couch
speaker cost	–	0
speaker benefit	4	–
<b>speaker net gain: 4</b>		
	not drink a bottle	not couch
speaker cost	–	0
speaker benefit	4	–
<b>speaker net gain: 4</b>		

There are two important things to note: first, threats are cheap! Both conditionally strengthened threats are beneficial for the speaker. The second important observation is that the speaker's benefit does not change depending on how much the hearer *doesn't* drink. Whichever element of the scale the speaker picks as the threshold is the one the hearer may not cross. Note that there are some values that the speaker should not pick if she wishes to behave rationally: if she knows that the hearer starts snoring if he drinks more than two glasses of wine, choosing a threshold of one bottle (more than two glasses) yields a threat which is not beneficial to the speaker: the hearer can comply with the terms of the threat and still create an outcome which is not beneficial to the speaker (i.e. by drinking three glasses, and then snoring). But a threat that is beneficial for the speaker at two glasses has the same benefit as the threat *If you drink one glass of wine tonight, you have to sleep on the couch*, and in fact any alternative amount that is lower than the threshold of two glasses, including *a drop*. Since the minimizer picks out the lowest element on the scale of drinking, by uttering (17a) the speaker makes the strongest possible threat.

Because threats are cheap for the speaker and they yield the same benefit (as long as they remain below the crucial threshold), it is rational for her to simply make the strongest threat possible.<sup>6</sup>

<sup>6</sup>I am ignoring two issues here: one is the potential benefit she may derive from first making a strong threat and then being generous and forgiving the hearer for drinking a small amount. The second issue is one of credibility: depending on how draconic a punishment the speaker threatens to deal out, the hearer may believe that if the punishment is disproportionate for the offense, the speaker will not follow through (Lopez-Rousseau et al. 2011).

## 4.2. Promises

While it is rational for a speaker to make the strongest possible threat, the opposite is true for a promise: promises are costly for the speaker. As soon as the speaker utters a promise, she is socially obligated to pay a reward if the hearer shows the behaviour specified in the antecedent. Therefore, in order to make a promise that is rational to make, the speaker needs to make sure that the costs she faces are offset by what she gains. Since a minimizer picks out the *endpoint* of the scale, the hearer only has to show a *minimal* amount of the behaviour the speaker wants to reward. In most cases, this is not enough for the speaker to make the promise beneficial to her.

Consider the following scenario. The speaker wants to tease the hearer, who does not like seafood, and dares him to drink some Clamato. If he manages to drink a substantial amount, for example one glass, she is willing to cook him dinner. However, making dinner involves a lot of effort (which is costly for the speaker), which means that the speaker does not want to reward the hearer for only drinking a spoonful or less.

- (19) a. If you drink this glass of Clamato, I will cook you dinner.  
 b. ??If you drink a drop of Clamato, I will cook you dinner.

	drink a drop	dinner
speaker cost	–	-5
speaker benefit	1	–
<b>speaker net gain: -4</b>		
	drink a glass	dinner
speaker cost	–	-5
speaker benefit	6	–
<b>speaker net gain: 1</b>		

	drink a drop	dinner
hearer cost	-1	–
hearer efficacy	–	6
<b>hearer net gain: 5</b>		
	drink a glass	glass
hearer cost	-3	–
hearer efficacy	–	6
<b>hearer net gain: 3</b>		

Using the minimizer in this context and making the *strongest possible* promise now works *against* the wishes of the speaker: by making the stronger promise, she is obligated to pay a reward even in situations where the promise is not beneficial to her. She does not want to reward the hearer for drinking only a small amount of Clamato. Uttering a promise which promises a reward for drinking very little Clamato is not beneficial for the speaker – it commits her to paying the reward as long as the hearer drinks an amount past the threshold indicated in the promise. Using a minimizer which picks the *endpoint* of the scale is therefore irrational.

So far I have shown that it is rational for the speaker to use minimizers in threats: using a minimizer makes the threat as strong as possible, and since threats do not cost the speaker anything, she can

just make the strongest possible threat (even if she may not plan to enforce the punishment for an offense at the low end of the scale). Promises, on the other hand, are costly for the speaker. Therefore it is often irrational to use a minimizer and making the strongest possible promise, because then the speaker is committed to paying a reward even if the hearer only does a very minimal amount. This is what causes minimizers to be odd in conditional promises.

### 4.3. Desperate promises

Notice that nothing in the analysis presented above leads to the conclusion that minimizers are not – semantically or pragmatically – licensed in promises. This means that we should find contexts in which minimizers do occur in conditional promises. These should be contexts where it is rational for the speaker to make the strongest possible promise (which is usually *not* a rational move).

We do indeed find these special circumstances. When the context supports that the speaker is in fact acting rationally when making a promise that is as strong as possible (often for rhetorical effect), minimizers are perfectly acceptable.

Consider the following scenario. A team of advertisers has an important meeting with a client. Alex is notoriously shy and resents public speaking, but Alex's boss believes that Alex is so charming that even the tiniest contribution from him will sway the clients. Ideally (for Alex's boss), Alex should give the entire presentation. But as long as he opens his mouth at all, his charm will still work. In such a context, there is a salient scale *Alex say a word; ... ; Alex present the campaign; ...* with corresponding conditional promises. It is then perfectly rational for Alex's boss to use a promise containing a minimizer ('*say a word*'). And the minimizer is in fact licensed, see (21).

(20) If you present the new campaign, I will give you a gigantic bonus.

(21) ✓ If you say a word, I will give you a gigantic bonus.

	present	giant bonus
speaker cost	–	-5
speaker benefit	16	–
<b>speaker net gain: 1</b>		
	say a word	giant bonus
speaker cost	–	-5
speaker benefit	10	–
<b>speaker net gain: 5</b>		

	present	giant bonus
hearer cost	-8	–
hearer efficacy	–	6
<b>hearer net gain: -2</b>		
	say a word	giant bonus
hearer cost	-1	–
hearer efficacy	–	6
<b>hearer net gain: 5</b>		

Note that in this context, both promises are beneficial for the speaker: even if the hearer only per-

forms the smallest possible action ('say a word'), the resulting benefit for the speaker is big enough to offset the cost of paying a giant bonus. For the hearer, on the other hand, the promise *without* the minimizer is not efficacious. He dislikes giving presentations so much that even the promise of a giant bonus does not offset the cost of having to give a presentation. The promise *If you give the presentation, I will give you a giant bonus* is therefore beneficial for the speaker without being efficacious for the hearer – and therefore, it is not effective. The hearer will most likely *not* act according to the speaker's wishes. Using a minimizer in a promise heightens the efficacy for the hearer: the promise containing a minimizer makes it worthwhile for the hearer to contribute to the presentation; the promise is more likely to be effective than the non-minimizer alternative. Therefore it is a rational move in this context to make the strongest possible promise, and the minimizer is licensed.

This type of context is not typical; this is why minimizers in promises often appear odd. Making a 'desperate' promise of this kind creates a rhetorical effect similar to the one described in van Rooij (2003) for minimizers in questions.

## 5. Conclusion

I have shown that minimizer NPIs are licensed in the antecedents of conditionals, regardless of whether these are neutral conditionals, threats, or promises. The reason why threats and neutral conditionals can host minimizers more easily than promises has to do with the meaning minimizers have and the function they play in the discourse: they pick out the endpoint of a scale and thus make the proposition they occur in stronger than its alternatives. It is rational for speakers to make strong threats since they have nothing to lose; threats are cheap for the speaker. Therefore minimizers are perfectly acceptable there. On the other hand, making a promise as strong as possible is generally not a rational discourse move since it means that the speaker is socially obligated to pay the promised reward already for a very small action on the part of the hearer. This often leads to the promise not being beneficial to the speaker. I have shown in the previous section that there are (rare) contexts in which even a very small action on the part of the hearer makes it worthwhile for the speaker to pay the reward. In these cases, the promise is beneficial for the speaker; making the promise is a rational discourse move, and the minimizer is licensed.

In sum, we need to explain the content-sensitivity of minimizers in conditional threats and promises not in terms of a condition on their licensing but in terms of an additional pragmatic reasoning mechanism. We can model it game-theoretically as the contrast between making a rational or an irrational discourse move. In order for minimizers to occur felicitously, they need to be *licensed* (via syntactic-semantic or pragmatic licensing), as they are in the antecedent of a conditional. But a second condition also needs to be satisfied: the utterance containing the minimizer must create only the kinds of commitments for the speaker that are beneficial to her.

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