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German *gut*-Predications: A case of 'overall' and 'partial' goodness

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Contents

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1 Introduction

1.1 *good*-predications

The puzzle that will be at the center of this thesis concerns modal *good*-predications as in (1). I follow Sode (2019) in using the term '*good*-predication' [1] to refer to a complex sentence where the matrix sentence attributes goodness to something given in the embedded sentence. E.g. in (1), *It's good* attributes goodness to whatever is designated by *(if) Alex comes to the party*. A first intuition may be that (1) claims that worlds in which Alex comes to the party are good worlds or that in worlds where Alex comes to the party the fact that they do so is good.

(1) It's good if Alex comes to the party.

good-predications are instances of modality, i.e. they are evaluated not only against the world of utterance but against a certain set of other possible worlds: In order to determine the truth or falseness of (1), it is not enough to consider the facts of the world in which the sentence is uttered. After all, it may be the case that Alex doesn't actually come to the party, so we cannot assign the property of being good to this state of affairs directly, and even in the case that they don't attend, the truth value of (1) can be determined. However, what is the case in the world of utterance plays an important indirect role in determining the truth value of (1). Consider the following worlds of utterance of (1) and the truth value (1) receives in each of these worlds, respectively:

(2)
a. w1: Everyone hates Alex, Alex$_i$ ruins every party they$_i$ go to, everything else is as in the actual world. - (1) false
b. w2: Everyone loves Alex, Alex makes every party more fun, everything else is as in the actual world. - (1) true
c. w3: Everyone loves Alex, Alex makes every party more fun, Alex has the Coronavirus, everything else is as in the actual world. - (1) false
d. w4: Everyone loves Alex, Alex makes every party more fun, Alex has the Coronavirus, the Coronavirus doesn't kill people but gives them super powers, everything else is as in the actual world. - (1) true

In order to determine whether (1) holds true in w1, we consider all the informa-

[1] I use italics exclusively for object language in the continuous text, and sometimes quotation marks for terminology or sloppy/so-to-say expressions. Occasionally, focus/emphasis comes with (small) capitals.

tion we have about the world of utterance, e.g. that people hate Alex, and then we think of a world where all of this is the case AND Alex comes to the party. For w1, the resulting possible word is one where the party is a misery, which we judge - in a next step - not good. That is why (1) comes out as false in w1.

Evaluated against w2, on the other hand, (1) is judged true because considering the facts of this world of utterance (people love Alex, ...), adding Alex' party attendance leads to the outcome of a great party in the resulting possible world. Assuming that we (the people who judge the truth of (1) in w2) find great parties good in some relevant sense of goodness, (1) is true in w2.

In w3, everything that holds for w2 (people love Alex, ...) is still the case, except that now the extra information that Alex has the Coronavirus has been added. Taking this new information into account, we now arrive at a possible world with a fun party but also some people being infected with the virus and their health being threatened. Usually, we will judge these negative consequences more relevant than the party fun, which is why the resulting possible world is judged not good and (1) receives a 'false' truth value in w3. As the worlds of utterance become more far-fetched from the actual world, like w4, this judgement may again be turned around to a 'true' for (1), now considering additionally the fact of w4 that the Coronavirus only gives people super powers there.

For the given examples, our judgement of goodness of the resulting possible worlds is rather straightforward: A world with a fun party (and no interfering additional information) is a good one, one with a miserable party is bad (everything else being equal), a world with Coronavirus infections is bad (even though there is an otherwise great party), one with newly gained super powers and a great party is good. But even in these seemingly clear cases it becomes obvious that goodness cannot be an all-or-nothing concept: A world with a miserable party may be better still than a world with no social activities at all for some people (at certain times), and a world with a great party alone is probably not quite as good as a world with a great party AND super powers. Clearly, goodness is gradable. It seems we can model this by locating possible worlds on a scale.

This scale would have to be highly context dependent: It is not a given that people judge the success of the party in (1) good. One might, for example, dislike the organizers or pity the neighbors.

A notion of goodness apt for a semantic description of *good*-predications must take into account this context/subject dependency as well as the gradability of *good* and provide an answer to the question of 'how high' a possible world must be on the relevant scale of goodness in order to 'count as good' - i.e. what is the comparison class? Possible candidates might be the world of utterance or contextually salient not-good-and-not-bad worlds (Sode (2019), section 2.2).

A first rough paraphrase of (1), repeated below as (3), considering everything mentioned up to this point may be something like (4):

(3) It's good if Alex comes to the party.

(4) A possible world in which Alex comes to the party and which is otherwise as similar as possible to the world of utterance[2] is higher than the reference group of possible worlds (the world of utterance?, neutral worlds?) on a scale of goodness that is determined by (the goals/values given in) the context.

Finally, it is important to note that *good*-predications look a lot like ordinary conditional sentences on the surface, i.e. (3) seems syntactically parallel to (5) at first glance:

(5) Susi wins a bet if Alex comes to the party.

What (5) and (3) have in common is that they 'say something about the world where Alex comes to the party', in an intuitive sense. However, WHAT they say about this world is very different: As paraphrased by (4), (3) rates the goodness of this world as high; whereas (5) says of this world that in this world Susi wins a bet. This tension between similarities and differences between *good*-predications and ordinary conditionals will play an important role in the discussion (especially in section 2.2).

The modal character of *good*-predications (that their truth or falseness depends on other possible worlds than the world of utterance) as well as the gradability and context dependence of the goodness they attribute make these sentences a fruitful subject of semantic investigation on their own. I will (based on Kratzer (1977, 1981, 1986, 1991, 2012b) and Sode (2019)) present a treatment of *good*-predications that takes all factors mentioned so far and more into consideration, and then argue, however, that this is still not sufficient to model natural language

[2]This similarity requirement is known as the 'principle of minimal departure' and highly debated in both linguistics and philosophy.

intuitions in the case of the puzzle presented in this thesis.

1.2 The puzzle

Under a semantic description of *good*-predications along the lines of the paraphrase in (4), German *good*-predications sometimes behave in unexpected ways.[3] The clear majority of German speakers judge (6-b) - from now on: 'SPENDING GOOD' - true in scenario (6-a) - 'CONFERENCE' -, which is rather surprising considering the consequences of spending 10,000 euros on a buffet in the given scenario:

(6) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. 'SPENDING GOOD':

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks

'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.' [4]

Let's think this example through parallel to a paraphrase like (4) for (1):

In the case of 'SPENDING GOOD', the scale of goodness that we need to locate possible worlds on is a less general one, i.e. it is more specified and restricted than it needed to be for (1), where we relied on a very intuitive notion of *good* in an 'everyday teleological sense' that provides that fun parties are high on this goodness-scale. Now, in the case of 'SPENDING GOOD', the scale is given overtly in the context provided by SCENARIO 'CONFERENCE'. There, it is said that organizing a conference is our shared goal, and that we prioritize good talks. This implies that good talks are more important to us than are other factors that might contribute to the overall success of the conference, such as food and drinks. When we attribute goodness to a possible world in SCENARIO 'CONFERENCE' as we do

[3] For now, this is no universal claim but restricted to German, but see subsection 5.3.1 for possible crosslinguistic parallels.
I have conducted 11 interviews with German native speakers without linguistic background as well as a handful of more informal conversations with German native speaker linguists.

[4] Unlike the English translations may suggest, none of the German sentences discussed have a counterfactual flavour, for discussion see subsections 3.2.1 and 3.2.2.

in uttering 'SPENDING GOOD', the scale we are using is something like 'goodness for the success of the conference primarily in terms of good talks'. It will become clear in the course of the following chapters that this precision of the scale methodologically strengthens the claim that I will make that the acceptability of 'SPENDING GOOD' is a problem for a classical approach to *good*-predications.

Having established this scale and thereby what is attributed BY *good* when we utter 'SPENDING GOOD', we now have to determine what it is attributed TO. Remember (1)=(7) and its paraphrase (4)=(8):

(7) It's good if Alex comes to the party.

(8) A possible world in which Alex does come to the party and which is otherwise as similar as possible to the world of utterance is higher than the reference group of possible worlds (the world of utterance?, neutral worlds?) on a scale of goodness that is determined by (the goals/values given in) the context.

In this case, we saw that what is judged to be good or not good is a possible world where the truth of the proposition in the embedded sentence is settled in a certain way (for (1)/(7): Alex does come to the party) and that is as similar as possible to the world of utterance in all other respects.

For the example under discussion now, 'SPENDING GOOD', the world of utterance is characterized by the context given in SCENARIO 'CONFERENCE'. Amongst other things it is the case in this world of utterance that we are organizing a conference and that we only have 10,000 euros to spend in total. Everything about the world of utterance of 'SPENDING GOOD' that is not specified in (6-a) will be filled out similar to the actual world (e.g. qualified people don't give talks without at least getting refunds for accommodation). On the basis of this world of utterance, we turn to a possible world where all of this is the case AND we do actually spend 10,000 euros on a luxury buffet, as the antecedent of 'SPENDING GOOD' alone would claim as a stand-alone proposition.

Just as in (1)/(7) evaluated against the worlds of utterance in (2), we now imagine the consequences of adding the truth of the antecedent (that we spend 10,000 on a buffet) to the world of utterance (where it is the case that we only have 10,000 euros). The obvious consequence of this is that we don't have any money left for anything else than the buffet, and so there are no talks at all in the possible world we arrive at. A world with no talks is expected to be very, very low on

a scale of goodness in terms of success of the conference that prioritizes talks, but in accepting 'SPENDING GOOD' we seem to affirm that it is high enough on this scale to justify a 'true' value. What 'SPENDING GOOD' seems to claim under this view is, analogous to paraphrase (8) for the sentence in (7), the following:

(9) A possible world in which we do spend 10,000 euros on a luxury buffet and which is otherwise as close as possible to the world of utterance (we have only 10,000 euros in total; people don't give talks for free, ...) is higher than some reference group of possible worlds on a scale of success of the conference primarily in terms of talks.

We would expect speakers to disagree with that, but in accepting 'SPENDING GOOD' in SCENARIO 'CONFERENCE', they seem to agree with it. That our best paraphrase so far, (9), doesn't predict the acceptability of 'SPENDING GOOD' is enough of a problem for an approach to *good*-predications along the lines of the paraphrases used so far. However, the critical point becomes even clearer when we contrast the relevant sentence in 'SPENDING GOOD' with its exact opposite - with negation scoping over the whole sentence - as in (10-b) (='SPENDING NOT GOOD'), in the same scenario, 'CONFERENCE', repeated below as (10-a):

(10) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. 'SPENDING NOT GOOD':

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks

'It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.' [5]

A rough paraphrase of the first sentence in 'SPENDING NOT GOOD' is as follows:

(11) ¬ (A possible world in which we do spend 10.000 euros on a luxury buffet and which is otherwise as close as possible to the world of ut-

[5]The modifier *natürlich* (naturally / of course / admittedly) seems to improve both 'SPENDING GOOD' and 'SPENDING NOT GOOD'. For a discussion of this and other modifiers see subsection 3.2.3.

terance (we have only 10.000 euros in total; people don't give talks for free, ...) is higher than some reference group of possible worlds on a scale of success of the conference primarily in terms of talks.)

Since (11) is the negation of (9), it is not surprising that it is judged true, as is the sentence it is supposed to paraphrase, 'SPENDING NOT GOOD' . So, the acceptability of 'SPENDING NOT GOOD' is captured by many approaches along the lines of the paraphrases used so far, but the acceptability of 'SPENDING GOOD' isn't. The puzzle discussed in this thesis consists in the fact that the same speakers accept 'SPENDING GOOD' and its negation 'SPENDING NOT GOOD' in the very same scenario. First thoughts suggest that the surprising aspect of this is that 'SPENDING GOOD' is accepted and not that 'SPENDING NOT GOOD' is. [6]

1.3 First thoughts on possible sources of the puzzle

As a starting point for the discussion to come, let's speculate very informally about the source of the puzzle, i.e. about the reason why the same person might be willing to accept both 'SPENDING GOOD' and its negation, 'SPENDING NOT GOOD', in the same scenario.

One of the easiest explanations would be to claim lexical ambiguity of one of the expressions in the sentences discussed and that the sentences contain two different lexical elements. This has the potential of making sentences compatible that look like each other's negation on the surface - since underlyingly they are not, as in the following example:

(12) a. I like banks [shores].
b. I don't like banks [finance institutes].

A possible candidate for such a treatment with regard to 'SPENDING GOOD' and 'SPENDING NOT GOOD' is *gut* (good) which might have two distinct lexical entries one of which has the standard teleological/moral meaning that locates possible worlds on a scale of goodness (relative to goals) whilst the other might bear more expressive force and mean something like English *awesome* or *funky*. It is plausible that we may find something awesome that we don't find 'literally' good and vice versa. Under an ambiguity based approach (as discussed in section 4.3), 'SPENDING GOOD' would receive a meaning along the lines of (13).

(13) The world in which we spend 10,000 euros on a buffet (and that is oth-

[6] 'SPENDING GOOD' and 'SPENDING NOT GOOD' have been presented in two examples to avoid priming effects as far as possible.

erwise like the world of utterance) is not 'literally' good, but good in the 'funky' kind of sense.[7]

Another way to go is to challenge the assumption that in both cases - 'SPENDING GOOD' and 'SPENDING NOT GOOD' - the speaker uses the same scale of goodness, namely 'success of the conference with priority of talks'. The latter might only be used for 'SPENDING NOT GOOD', resulting in its expected acceptability, while for 'SPENDING GOOD' the related part of the context might be ignored or altered in some way so that another scale of goodness (e.g. culinary success) is used. There are different ways of spelling out this idea (as will be discussed in subsections 4.5.1 and 4.5.2), but the rough idea is something like (14) for 'SPENDING GOOD'.

(14) If we only consider culinary aspects (contrary to our actual preferences), then the world in which we spend 10,000 euros on a buffet (and everything else is like in the world of utterance) is good.

Alternatively, what is ignored from the context in SCENARIO 'CONFERENCE' for the interpretation of 'SPENDING GOOD' might be the information that we only have 10.000 euros available. Context plays a huge role in the interpretation of modal expressions like *good*-predications, so a slightly different or only partially considered context might make all the difference between 'SPENDING GOOD' and 'SPENDING NOT GOOD'. Our priorities would be the same for 'SPENDING GOOD' and 'SPENDING NOT GOOD' - talks are most important - but in the case of 'SPENDING GOOD' the possible world which is located on this scale would not be maximally similar to the world of utterance in the one aspect of the total amount of money, so that 'SPENDING GOOD' can be paraphrased as (15).

(15) If we ignore the fact that 10,000 euros is all the money we have and leave everything else as it is, then the world in which we spend 10,000 euros on a buffet is good.

There are two variants of this possibility discussed in subsections 4.6.1 and 4.6.2, and the solution I argue for in the end will be of this type.

Aside from an ambiguity approach, an approach that assumes different scales of goodness ('Ordering Sources', see subsections 2.1.2, 4.5.1, 4.5.2) and an

[7] I thank one of my consultants for the comment that they would prefer German *geil* (wicked/awesome) or *cool* (cool) in 'SPENDING GOOD'.

approach that claims different possible worlds are considered ('Modal Bases', see subsections 2.1.1, 4.6.1, 4.6.2), there are in principle the following other ways to go that will be discussed briefly and excluded quickly in chapter 4: (16-a), as discussed in section 4.1, is a paraphrase of the intuition that 'SPENDING GOOD' doesn't judge the WORLD where we buy a 10,000 euro buffet to be good, but only a specific aspect of it, namely that we have a great buffet in this world. (16-b), discussed in section 4.2, is the attempt to spell out the idea that 'SPENDING GOOD' might be judged true simply because of a very low comparison class (i.e. it is for some contextual reason very easy to 'count as good'). And finally, (16-c) represents a radically different approach to *good*-predications than the one sketched so far in that it takes goodness to be attributed to propositions, not worlds. I will reject this in section 4.4.

(16) a. There is some good aspect about / part of the world where we spend 10,000 euros on a buffet.
b. The world where we spend 10,000 euros on a buffet is better than a world where we don't do anything with the money.
c. The proposition 'that we spend 10,000 euros on a buffet' has - in the possible world where we do so - the attribute of being good.

1.4 Outlook and structure

The whole thesis will deal with the problem which the puzzle from section 1.2 poses for standard modal semantics. I will from now on refer to the 'different kinds of goodness' in 'SPENDING GOOD' and 'SPENDING NOT GOOD' as 'partial' and 'overall' goodness, respectively. This is not meant to imply any bias towards one of the solutions to the puzzle sketched in section 1.3. Rather, it's supposed to capture the very rough intuition that the notion of goodness 'SPENDING GOOD' is using is not considering everything, in one way or the other.

In the next chapter, chapter 2, I will give a brief introduction into some aspects of modality that are relevant for the puzzle, namely Kratzer (1977, 1981, 1986, 1991, 2012b)'s concepts of Modal Base (subsection 2.1.1) and Ordering Source (subsection 2.1.2) and Sode (2019)'s minimalist approach to *good* (section 2.2). After this theoretical introduction, I will come back to the puzzle and compare and contrast it with other modal puzzles in section 3.1. Then, I will present some of its striking semantic, pragmatic and information-structural behaviour that shows when the original puzzle is varied (section 3.2) and in misunderstandings concerning 'overall' and 'partial' goodness (section 3.3). The observations

from chapter 3 are then used for the discussion in chapter 4. The most important empirical point from chapter 3 for the discussion in chapter 4 will be that the puzzle disappears whenever a specific information from the context is repeated directly in the sentence.

After excluding some of the solutions I have already sketched in section 1.3 in sections 4.1, 4.2, 4.3 and 4.4, I will have reduced the options to Ordering Source based versus Modal Base based solutions to the puzzle. I will contrast two versions of each of these two solutions in subsections 4.5.1, 4.5.2, 4.6.1 and 4.6.2. The important arguments in this phase of the discussion will be that (i) a good solution to the puzzle must not only explain the puzzle as such, but also restrictions on when 'partial' goodness is NOT available; and (ii), the role of repetition of context information must be explained. Based on these two factors, I will decide in favour of a Modal Base based solution that assumes exactly two 'sizes' of Modal Bases, Small Modal Base and Large Modal Base, to be available in *good*-predications.

At the very end, I will link the remaining observations from chapter 3 to my solution (section 5.1), present three ways in which Small Modal Base and Large Modal Base might be understood ontologically (section 5.2), and share first thoughts on whether the puzzle might be a symptom of a broader phenomenon (section 5.3).

2 Background

2.1 Kratzer's Conversational Backgrounds

We saw in section 1.1 that even for the most informal paraphrases of *good*-predications a notion of possible worlds is needed. This is because when we utter (1), repeated as (17), we don't have to know whether Alex actually comes to the party in the world of utterance - we can model this by claiming that we attribute goodness to some other world where this is the case, amongst other things.

(17) It's good if Alex comes to the party.

good-predications share this reference to possible worlds with other modal expressions such as phrases with *ought*, *can* or ordinary conditionals. In this section, I introduce two semantic concepts that have proven powerful in dealing with modal expressions of various kinds, namely Kratzer (1977, 1981, 1986,

1991, 2012b)'s Modal Base and Ordering Source. The umbrella term for these concepts is 'Conversational Background'. The idea behind these is to account for the context sensitivity of modal statements as well as their reference to possible worlds. Kratzer (1977, 1981, 1986, 1991, 2012b)'s framework builds on possible worlds semantics that treats propositions as sets of possible worlds (Kratzer 2012d, 1977). Formally, Modal Base and Ordering Source are functions from possible worlds to sets of propositions, conventionally represented by the letters f for Modal Bases and g for Ordering Sources.[8]

Both functions, Modal Base and Ordering Source, relate what is the case in the world of utterance with which possible worlds are considered for the evaluation of truth of the modal statement, or how they are considered. Their context dependency explains why the truth of (17) is sensitive to facts from the world of utterance (like the answer to the question if the other guests like Alex) as well as the standards of goodness in the given context (e.g. it might be good for the success of the party, but not good for the neighborhood).

Kratzer (1977, 1981, 1986, 1991, 2012b)'s treatment of modality in terms of Conversational Backgrounds has become the standard theory of modality and is powerful in dealing with a range of cases. Alternative theories usually don't reject Kratzer (1977, 1981, 1986, 1991, 2012b)'s concepts but add something to them, e.g. a third Conversational Background (see Cariani et al. (2013), amongst others) and/or a lift (see Lassiter (2017), amongst others). I therefore take it to be unproblematic for the time being to assume that we should be able to deal with my puzzle within Kratzer (1977, 1981, 1986, 1991, 2012b)'s framework. However, this presupposes that the sentences in my puzzle really are modal statements and that they share the relevant properties with certain kinds of other modal expressions. This assumption will be made a subject in the second part of the background chapter, section 2.2, and contested by Lassiter (2017) in section 4.4.

2.1.1 Modal Base

The rough idea of a Modal Base is that this function restricts which facts are considered for the evaluation of a modal statement, i.e. it restricts which pos-

[8]However, the terminology in Kratzer (1977, 1981, 1986, 1991, 2012b)'s reception varies between the original meaning as a function, the value of this function in a certain world under discussion, f(w)/g(w), and, in the case of the Modal Base, the corresponding set of possible worlds (see Cariani et al. (2013)) that results from intersecting the intensions of the 'Modal Base propositions', i.e. the set of worlds where all of these are true. I don't differentiate between these uses because this is not a source of confusion in the context of my puzzle.

sible worlds are included in and excluded from consideration in the first place. This restriction can be imagined as the first step towards the full meaning of modal statements, even though the cognitive picture will probably be a different one. I will first sketch the motivation in Kratzer (2012d, 1977) for it in the case of epistemic *must* and *can* (since these cases make the necessity of Modal Bases most plausible), and then generalize the idea, again referring to Kratzer (1977, 1981, 1986, 1991, 2012b), and apply the concept to the sentences of my puzzle. I will highlight parallels between conditionals as analyzed in Kratzer (1986, 2012a) and 'SPENDING GOOD'/'SPENDING NOT GOOD'.

Kratzer (2012d, 1977) picks up on the problem of the high context dependency of modals that has been noted by Lewis (1973), amongst others. When it comes to epistemic *must* and *can*, it seems tempting to describe them as universal and existential quantification over the set of all possible worlds, respectively, parallel to necessity and possibility operators in modal logic. This would mean for (18-a) to mean something like (18-b) and for (18-c) to mean something like (18-d). However, this is clearly to strong in the first case and to weak in the second case:

(18) a. (People's clothes are wet when they enter the building.) It must be raining.
b. All possible worlds are such that it rains.
c. Anna can be the murderer. (She hated the victim and doesn't have an alibi.)
d. There is at least one possible world where Anna is the murderer.

When we utter (18-a), we usually don't claim that it is a logical necessity that it is raining. After all, it is not even the case in many possible worlds that people's clothes are wet, which led us to the assumption that it must be raining in the first place. Rather, we seem to be saying something like (19):

(19) Considering the evidence / in view of how people look when they enter the building: It must be raining.

Building on paraphrases similar to these, Kratzer (2012b,d, 1977, 1981) claims that different Conversational Backgrounds (Ordering Sources as well as Modal Bases) might be made explicit by different adverbial phrases. There are different kinds of Modal Bases, and in the case of (18-a) we are dealing with an epistemic one (Cariani et al. 2013, Kratzer 2012d) that considers all possible worlds where we have the same evidence/belief about the murder. Similarly, when we utter

(18-c), we don't just say that there is at least one possible world amongst all of them where Anna is the murderer. This would be to weak: There is also SOME possible world where I, the author of this thesis, am the murderer. The Modal Base restricts the worlds we are considering to ones where our beliefs about the world of utterance hold or where the evidence is as it is in the world of utterance, so we are now claiming that even amongst this smaller set of possible worlds there is at least one where Anna is the murderer. This is way closer to what we actually seem to claim when we utter (18-a) and (18-c), respectively. (You may recognize that both paraphrases still don't reflect our natural language use perfectly, though. This is the motivation for Ordering Sources in Kratzer (2012d, 1977), see section 4.5.)

What makes Kratzer's framework such a useful tool for analyzing modal expressions is that it is highly adaptable to different kinds of modal statements via different choices of Modal Bases and Ordering Sources (for the latter see the next section, 4.5). One of the most important kinds of Conversational Backgrounds that often serves as a Modal Base is the realistic Conversational Background. It assigns to a possible world a set of propositions that are true of it. As a consequence, when this possible world is the world of utterance and a realistic Conversational Background functions as the Modal Base, only worlds in which some of the facts of the world of utterance are also the case are considered.[9] Circumstancial Modal Bases - that can be paraphrased as 'under the given circumstances' - are arguably a subgroup of realistic Modal Bases. Realistic Modal Bases are also relevant for deontic modal verbs such as *should*, *must* or *ought* whenever they refer to (e.g. moral) norms rather than epistemic states, as in (20).

(20) We must help the cats.

By uttering (20), we don't say that we have an obligation to help the cats in every possible world (for a discussion of the obligation part see the next subsection, 2.1.2) - since there are also possible worlds where the cats are fine and don't need help, and even worlds where cats are evil. Assuming a realistic Modal Base, we claim by uttering (20) that we have an obligation to help the cats in all possible worlds that resemble the actual world in some relevant respects.[10]

[9] A TOTALLY realistic Conversational Background, on the other hand, assigns to a possible world a set of propositions that characterizes it uniquely, Kratzer (2012c, 1981). Whenever it is used for a modal statement, we are only talking about possible worlds that are identical to the possible world under discussion, e.g. the world of utterance.

[10] Assuming a totally realistic Modal Base, (20) means that we have this obligation in the actual world.

good-predications, the sentences from my puzzle, share with (20) that they are normative statements, which will be relevant for the kind of Ordering Source they use (see subsection 2.1.2 and section 4.5). As for the Modal Base, their relevant feature is that they are conditionals - or least they look and in many respects behave like conditionals (see sections 2.2 and 4.4). To see that they intuitively share the choice of a Modal Base that we would expect for an ordinary conditional, compare the following two sentences:

(21) a. Sue loses a bet if Alex comes to the party.
b. It's good if Alex comes to the party. (=(1))

According to Kratzer (2012a, 1986), the antecedent of a conditional adds the corresponding proposition to the Modal Base. A simple version of a conditional structure due to Kratzer is given in (22-a).

(22) a. (if α) NEC^f β
b. (if Alex comes to the party) NEC^f (Sue loses a bet)

NEC is the necessity operator[11] - in this specific configuration also: conditional operator - that brings in / is relative to the 'original' Modal Base f (and possibly an Ordering Source, see subsection 2.1.2). When NEC appears with an if-clause, the if-clause adds another restriction in the form of a proposition to the Modal Base.

The Modal Base in the examples above was arguably a realistic (or possibly even a totally realistic) one 'before' that addition. The world of utterance of (21-a) and (21-b) isn't specified since I haven't given a context for them. Let's assume the following one for both of them:

(23) SCENARIO FOR (21-A) AND (21-B), w: There is a party and Alex hasn't replied to the invitation. Sue made a bet with Toni that Alex won't come to the party. Everyone likes Alex$_i$, they$_i$ make every party more fun, they$_i$ don't have the Coronavirus. Toni has green hair.

In this case, the 'original' realistic Modal Base might look like this:

(24) f(w)={There is a party; Alex hasn't replied to the invitation; Sue made a bet with Toni that Alex won't come to the party; Everyone likes Alex;

[11] Two versions/spellouts of NEC are MUST and WOULD.

Alex makes every party more fun; Alex doesn't have the Coronavirus}[12]

The 'final' Modal Base *f*+ on the other hand, considering the embedded proposition from the antecedent of (21-a)/(21-b), would look something like this:

(25) *f*+(w)={There is a party; Alex hasn't replied to the invitation; Sue made a bet with Toni that Alex won't come to the party; Everyone likes Alex; Alex makes every party more fun; Alex doesn't have the Coronavirus; Alex comes to the party}

Both the ordinary conditional (21-a) and the *good*-predication (21-b) use *f+(w)* as their Modal Base. However, they differ in how this Modal Base is used further in the evaluation of their truth: (21-a) states that the world(s)[13] where all properties in *f+(w)* are true (and that aren't very far from the usual way things go, see subsection 2.1.2) are/is such that it is also true that Sue loses a bet. This is clearly true in w. (21-b), on the other hand, claims of the resulting world(s) (where Alex comes to the party and every other property from *f+(w)* is true) that it has / they have the property of being good. (For a discussion of what 'having the property of being good' means, see subsection 2.1.2 and section 2.2.)

In the case of the out-of-the-blue statements (21-a) and (21-b) we saw that they were severely underspecified without a context. If e.g. the context would have been such that everyone hates Alex, (21-b) would likely come out false, and if it weren't for the bet that I gave in the context, (21-a) would have turned out false. Kratzer (2012d, 1977) considers this context dependency a feature of her framework. And it is also the reason why the context plays such an important role for my puzzle: If it weren't for the precise information of what is the case in the world of utterance of 'SPENDING GOOD' and 'SPENDING NOT GOOD', the puzzle wouldn't even be one, since two different Modal Bases could be assumed for the two sentences, respectively, resulting from an underspecified context. (If you think that this option is still there in my context, see section 4.6 and chapter 5 for discussion.) The Modal Base *f*+ applied to the world of utterance of 'SPENDING GOOD' and 'SPENDING NOT GOOD' (w*) and enriched by the proposition from the shared antecedent, 'if we spend 10,000 euros on a buffet', can be assumed to be something like (27) for both sentences of the puzzle:

[12] A totally realistic Modal Base would also include the irrelevant fact that Toni has green hair. It's hard to decide whether we are by uttering (21-b) claiming something about a world that is the same as w except that Toni has red instead of green hair, but the answer to this question is not relevant for my puzzle.

[13] Singular possibly if we assume a TOTALLY realistic Modal Base.

(26) SCENARIO 'CONFERENCE', IN w*: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

(27) *f*+(w*)={ There is a linguistics conference; We have 10,000 euros in total to spend for it; We are free to distribute the money between the location, payments and refunds for speakers and food and drinks; We spend 10,000 euros on a buffet }

(28) a. 'SPENDING GOOD':

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks

'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

b. 'SPENDING NOT GOOD':

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks

'It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

The world(s) where everything from *f+(w*)* is the case (and nothing absurd happens, see subsection 2.1.2) are clearly such that we don't have talks. We expect this to be bad, given our goals, as I will discuss and relate to the concept of Ordering Sources, Kratzer (2012d, 1977), in the next subsection and section.

2.1.2 Ordering Source

We have seen that restricting the possible worlds that are quantified over to those selected from the Modal Base gets us closer to the actual meaning of modal sentences. However, we haven't been able to account for the normativity encoded in many modal statements including 'SPENDING GOOD' and 'SPENDING NOT GOOD'. Ordering Sources, as introduced in Kratzer (2012d, 1977), will do this job. Ordering Sources are Conversational Backgrounds just like Modal Bases, i.e. functions from possible worlds to sets of propositions, but they have a dif-

ferent role to play in the processing of a modal sentence. The rough idea is that while the Modal Base f tells us which worlds to consider in the first place via a clear in-or-out criterion (e.g. part of the evidence or not?), the Ordering Source (conventionally: g) restricts these further, but based on the location of these possible worlds on a scale. The Ordering Source leaves us only these possible worlds to quantify over that (additionally to being part of the Modal Base) are high (as high as demanded in a particular context) on a given scale, i.e. a ordering of these possible worlds according to a certain criterion that may vary a lot - depending on the context. Let's go through the examples from subsection 2.1.1 and see which role is left for the Ordering Source in these cases.

First, remember (18-a) and (18-c) with epistemic *must* and *can*, repeated below as (29-a) and (29-b):

(29) a. (People's clothes are wet when they enter the building.) It must be raining.
b. Anna can be the murderer. (She hated the victim and doesn't have an alibi.)

We saw in subsection 2.1.1 that these sentences use (a certain kind of) realistic Modal Bases, i.e. we only consider worlds where the evidence is as in the world of utterance: For (29-a) only worlds where people's clothes are wet when they enter the building, and for (29-b) only worlds where Anna hated the victim and doesn't have an alibi. It is much more plausible that by uttering (29-a) we claim that all possible worlds where people are wet etc. are such that it is raining, compared to claiming that plainly all possible worlds are such that it is raining - that's what we gained by using the concept of Modal Base. However, not even all worlds which share the evidence with the world of utterance are such that it is raining. There are less plausible but possible other explanations for the evidence. E.g. someone could be hosing everyone with a garden hose before they enter the building, or - a possible world that is even further from the actual one in that it contradicts more assumptions about the ways things usually go - Europe was flooded and all people outside our waterproof building are living under water now as merpeople.

Similarly, (29-b) doesn't just mean that amongst all possible worlds where Anna hated the victim and doesn't have an alibi (= Modal Base) there is at least one where she is the murderer. Consider a different set of evidence: Anna didn't know the victim and her wife testifies they were at home watching TV at the

time of the crime. The realistic (arguably epistemic) Modal Base would restrict the set of possible worlds to only those where the evidence is like this - i.e. discharging for Anna. Still, there are far-fetched worlds where the evidence speaks against Anna being the murderer but she still is - e.g. her wife could be lying for her and Anna could have randomly shot a stranger; or - more implausible even - Anna might have an evil twin her wife doesn't know about and be part of a conspiracy to kill all redheads. So, even with the restriction that comes with the realistic Modal Base, the resulting meaning is too weak for (29-b). Instead, we want (29-b) to mean something like (30):

(30) Given the evidence (= Modal Base), there is at least one possible world amongst the plausible ones / where nothing absurd happened (= Ordering Source) that is such that Anna is the murderer.

We have seen for (29-a) and (29-b) that the Ordering Source seems to further restrict the possible worlds considered to plausible ones / to ones where nothing very unlikely is the case. This kind of Ordering Source is conventionally called a stereotypical Ordering Source. While the result of applying the Ordering Source function is - as in the case of a Modal Base - a set of possible worlds that is included for consideration / that is available for quantification, this set is not directly formed from a binary criterion but from the position of each world on a scale. In the case of a stereotypical Ordering Source as for (29-a) and (29-b), this arguably is the scale of stereotypicality. To put it very informally: How close is this world to the way things usually go? Depending on the context, the Ordering Source of epistemic *must* and *can* can be stricter (only considering very stereotypical worlds) or more permissive (only excluding the most absurd worlds). The scalarity that comes with Ordering Sources becomes clear when we compare possible answers to (29-a) and (29-b): It might be accepted in some contexts to answer (31) to (29-a), or (32) to (29-b).

(31) No, someone could be hosing everyone with a garden hose before they enter the building.

(32) Yes, but Anna COULD be the murderer even if she didn't know the victim and her wife gave her an alibi: her wife might be lying and Anna might have just randomly shut a stranger.

If this is accepted in a certain context, that means that the Ordering Source in this context is more permissive in that it includes less stereotypical worlds. Under this permissive Ordering Source, however, it would probably still be rejected to answer (33) to (29-a), or (34) to (29-b):

(33) No, it might be that Europe was flooded and all people outside our waterproof building are living under water now as merpeople.

(34) Yes, but Anna COULD be the murderer even if she didn't know the victim and her wife gave her an alibi: Anna might have an evil twin her wife doesn't know about and be part of a conspiracy to kill all redheads.

These worlds - while certainly possible and also part of many realistic Modal Bases - are so far-fetched that it is hard to find contexts where an Ordering Source would be so permissive as to let them pass.

As with the Modal Bases, Ordering Sources may not only vary in their scope/ permissiveness, but also in kind/quality - in the case of Ordering Sources the type of scale. Alongside with stereotypical Ordering Sources, deontic Conversational Backgrounds - based on a body of laws or regulations - are common as Ordering Sources (Kratzer (2012d, 1981)). Consider again (20), repeated as (35):

(35) We must help the cats.

We saw in subsection 2.1.1 that (35) has a realistic or a totally realistic Modal Base, considering only worlds that share a lot of or all properties with the world of utterance. In this case, what is missing from the - now not epistemic but deontic - contribution of *must* is the normativity, i.e. that it is in these similar worlds where e.g. the cats are in danger and not evil (= Modal Base) DEMANDED - by law, by moral obligations, ... - that we help. Let's assume that (35) is to express an internal moral obligation. Then, what (35) means under a plausible Kratzer (1977, 1981, 1986, 1991, 2012b) inspired analysis is (36):

(36) Considering only worlds that are like ours in that there are cats in danger, cats aren't evil... (= Modal Base), the worlds that are relevantly close to our standards of morality, that fulfil our moral rules best (= Ordering Source) are such that we help the cats.

The relevant sentences from my puzzle, the first one in 'SPENDING GOOD' and 'SPENDING NOT GOOD', respectively, share with (35) that they use a deontic Conversational Background as the Ordering Source. But deontic Conversational Backgrounds are divided into subgroups, e.g. bouletic Conversational Backgrounds (based on bodies of wishes), or teleological ones (based on bodies of goals), Kratzer (1981, 2012d). In the case of my puzzle, the Ordering Source is designed to be a teleological one: It is given in the context that we share

the goal of organizing a - primarily linguistically - successful conference. The Ordering Source g(w*) may even be made explicit by the adverbial phrase *for the - primarily linguistic - success of the conference*.[14] The specificity of this goal is important for the puzzle to work: Given this very clear goal, it is easy to assess what is good relative to this goal, e.g. that it is bad if no talks take place.[15]

When it comes to the success of a linguistics conference, many factors play a role and are arguably weighted differently, e.g. quality of talks, the listeners' moods, room temperature, location, ... However, the scenario 'CONFERENCE' has made it perfectly clear that talks are our top priority while other factors may contribute as well, but are less important:

(37) SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

Simplifying, I will for the remaining part of the thesis only consider the two factors that are relevant for my puzzle, namely quality of the talks and quality of the food. (All others are the same in 'SPENDING GOOD' and 'SPENDING NOT GOOD'.) Intuitions on the preference ordering are very clear in the case of my puzzle: Most of all, we want to have good talks, and another but lesser goal is to have good food. The optimal world relative to our goals is one where both talks and food are great, the worst world is one where both are bad or there are neither talks nor food. [16] If we can only have one of the two - good talks or good food - the talks are preferred. This results in the following ordering for 'SPENDING GOOD' and 'SPENDING NOT GOOD':

[14]For a discussion and application of adverbial phrases like this, see subsection 4.5.2.

[15]I also tried testing the puzzle with cases of ethical decisions instead of this goal-relative notion of goodness, i.e. German equivalents of (i-b):

(i) a. SCENARIO: You are the only surgeon. Two emergencies: a heart attack and a broken leg.
b. ??It would of course be good if you did the leg surgery.

However, the judgements got blurry in these cases, because people started making ethical considerations, e.g. trying to discuss consequentialism versus deontological ethics with me. This is presumably not because moral *good* works differently from a teleological one, but because what is overall morally good is unclearer than what is good for the success of a conference.

[16]I don't differentiate between these two because I don't have clear intuitions on whether it is better if there are no talks or bad talks, whether there is no food or bad food in the case of a conference.

(38) g(w*) = good talks + good food > good talks + no/bad food > no/bad talks + good food > no/bad talks + no/bad food [17]

We have seen that the relevant sentences from my puzzle share the kind of Modal Base with many ordinary conditionals, i.e. a realistic Modal Base plus the antecedent-restriction,[18] and have a teleological Ordering Source that draws on the ordering above. In the next section, we will see how these two come together in the case of *good*-predications.

2.2 Sode's approach to *good*

2.2.1 What's missing now

Applying Kratzer (1977, 1981, 1986, 1991, 2012b)'s concepts of Modal Base and Ordering Source to the sentences of my puzzle, we identified the kinds of Conversational Backgrounds that we would like to serve as Modal Base and Ordering Source, respectively, in 'SPENDING GOOD' and 'SPENDING NOT GOOD'. As for the Modal Base, we noted that the sentences of the puzzle behave like many ordinary conditionals: They use a realistic (or, in the case of counterfactuals, empty) Modal Base to which the proposition from the antecedent is added, i.e the relevant facts from the utterance world (the scenario) plus 'that we spend 10,000 euros on a buffet' is the case.

However, unlike in the case of an ordinary conditional, in uttering a *good*-predication, we don't make a claim that all the (stereotypical) resulting worlds are such that the proposition from the consequent is also true in these worlds.[19]

[17] This notation is not correct, strictly speaking, because it doesn't give a function but the ordering it is based on. The actual Ordering Source is a function from possible worlds to propositions that, when functioning as an Ordering Source and applied to 'SPENDING GOOD' or 'SPENDING NOT GOOD' in the world of its utterance, sorts out the possible worlds that are relevantly high on this scale. The problem is that we don't know which worlds are RELEVANTLY high on this scale without excessive empirical testing (we only know that if a world with no/bad talks and good food passes, so does any 'higher' world), so it is more practicable to give the scale instead. Also, the terminology around Modal Bases and Ordering Sources already varies so much in the reception, Cariani et al. (2013), that I don't fear to contribute to confusion.

[18] Note, however, that one might argue that *good*-predications have two Ordering Sources, the realistic/stereotypical one from the conditional and the deontic one that comes with *good* - a background assumption of Sode (2019). The result of combining the Modal Base with the first - realistic/stereotypical - Ordering Source may be equivalent to what I'm assuming as a Modal Base for *good*-predications.

[19] A strong argument why this cannot be the meaning of *good*-predications comes from Sode (2019): The resulting meaning would be that only IN THE RESULTING WORLD(S) it is the case that 'it' is good, i.e., *good*-predications would not make any claim about preferences in the world of utterance; *It is good, if p* would be perfectly compatible with no-one desiring p in the world of utterance - since the preferences themselves would be conditionalized. Sode (2019) calls this a shifted interpretation of *good*. What we want is the assessment and standards of goodness to

Rather, we seem to say that the worlds resulting from the restrictions (of the realistic Modal Base plus the antecedent) are good according to utterance world standards, i.e. we attribute goodness to these worlds, so that *good* will have to be analyzed as a predicate of worlds, see Sode (2019) and the rest of section 2.2.

As for the Ordering Source, we have seen that *gut* (good) seems to come with or go together with a normative scale that is related to a deontic Ordering Source, the optimum being worlds where both 'that we have good talks' and 'that we have good food' are true, see (38). While *gut* (good) can in principle introduce any deontic scale - it may also attribute moral goodness or goodness relative to the speaker's wishes, for a bouletic Ordering Source - in the particular case of my puzzle, the Ordering Source is a teleological one - it uses a scale of goodness relative to the goals concerning the conference. This fits the initial intuition from the introduction (sections 1.1, 1.2) that in uttering a *good*-predication, we claim that certain possible worlds where the antecedent proposition is the case (= the contribution of the conditional to the Modal Base) and that are otherwise similar to the world of utterance (= the original realistic Modal Base)[20] are judged to be good on a context dependent scale of goodness (= the Ordering Source).[21]

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stem from the world of utterance. The rest of section 2.2 will raise this issue again, but see also Sode (2019) for a discussion of this and of what *it* might refer to here.

[20] In the case of counterfactuals, when allowing for three Conversational Backgrounds: the combination of an empty Modal Base and a realistic/stereotypical Ordering Source.

[21] For most of this thesis, I take it for granted that there are exactly two different Conversational Backgrounds at play when looking at a single sentence of my puzzle - one (realistic) Modal Base and one Ordering Source (operating on the goodness scale). In subsection 5.2.3, I will mention the possibility of a third kind of Conversational Background as one of three ways to model my solution to the puzzle. However, it would be at least as promising to look into the idea that *good*-predications might be instances of second order modality with more than one instance of a Modal Base and/or an Ordering Source, analogous to (i).

(i) We must help the cats if they are in danger.

(i) is a conditional with an additional deontic modal verb in the consequent and is predicted to mean something like (ii):

(ii) All worlds that are like the world of utterance in the relevant respects and where there are cats in danger (= realistic Modal Base + antecedent restriction due to conditionality) and where nothing absurd is the case (stereotypical Ordering Source) are such that it is also the case that: The worlds that are relevantly close to fulfilling our moral obligations (deontic Ordering Source) are such that we help the cats.

I take it to remain an open question whether this prediction is correct for some (or possibly even all) uses of (i). Note, however, that the obligation is not located at the world of utterance in this case, and that there are two Ordering Sources and possibly also two Modal Bases involved. It might be, e.g., that Modal Base 1 (realistic) and Ordering Source 1 (stereotypical) combine to Modal Base 2, and Ordering Source 2 introduces the scale of moral obligation - or, in the case of *good*-predications, if they were analogous, the scale of goodness. An argument in favour is that *good*-predications might need a stereotypical Ordering Source along with the deontic one to receive their natural language meaning, and also, the common stereotypical Ordering

That said, we are facing a challenge that exists independently from the unexpected acceptability of 'SPENDING GOOD' in scenario 'CONFERENCE' and that concerns even the 'standard use' of *good*-predications that appears in 'SPENDING NOT GOOD', repeated below:

(39) a. SCENARIO 'CONFERENCE'

b. 'SPENDING NOT GOOD':

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks

'It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

This other puzzle concerns the question of how sentences like 'SPENDING NOT GOOD' receive a semantics that differs significantly from ordinary conditional semantics while at the same time looking like an ordinary conditional on the surface. Once we have solved this for *good*-predications on a general level - or taken bits of such a solution as a working hypothesis, as I'll do here -, we'll have the relevant semantic characteristics of 'SPENDING NOT GOOD' in order to decide what distinguishes 'SPENDING GOOD' from such non-puzzling *good*-predications.

Any account of *good*-predications must explain the following: (i) Why do *good*-predications with *wenn/if*-sentences have a deontic Ordering Source that (other) conditionals lack? (ii) If *good* is the source of it, as it seems, intuitively: Which criteria do worlds have to fulfil to 'count as good'? How exactly does the adjective sort these out? And (iii): How can the property of being good be attributed to a possible world (where it is the case that we spend 10,000 euros on a luxury

Source of ordinary conditionals would be preserved this way. However, it is not easy, if at all conceptually possible, to distinguish the combination of an empty or realistic Modal Base and a stereotypical Ordering Source from a realistic or totally realistic Modal Base. These might even be in their outcome equivalent descriptions of the same empirical facts. Sode (2019) uses three Conversational Backgrounds for *good*-predications: Modal Base and stereotypical Ordering Source of the standard conditional plus deontic Ordering Source of *good*.

Note also that Sode (2019)'s observation that the scale of goodness is actually located at the world of utterance for most cases of *good*-predications might as well be relevant for sentences like (i), for the scale of moral obligation that comes with *must*, so this might be a problem of higher order modality or conditionals in general.

Related thoughts will pop up in footnotes again and might be linked to my solution to the original puzzle in a promising way, but I will have to leave this almost entirely to further research. At the time of finishing this thesis, Frank Sode is working on a way in which unshifted interpretations of different modal expressions might be analyzed in a uniform way, see Sode (2022).

buffet, amongst other other things), considering the syntactic position of *good*?

(iii) is crucial for Sode (2019)'s line of argumentation and will become clearer below. To grasp the basic problem, consider again a *good*-predication, (40-b), compared to an ordinary conditional, (40-a):

(40) a. Sue loses a bet if Alex comes to the party. (=(21-a))
b. It's good if Alex comes to the party. (=(1), = (21-b))

At first glance, these two sentences seem to be syntactically parallel, and up to a certain point, this is in line with their actual interpretation. We saw this in subsection 2.1.1; remember also the structure of the ordinary conditional (40-a):

(41) a. (if α) NEC^f β
b. (if Alex comes to the party) NEC^f (Sue loses a bet)

The antecedent property 'if Alex comes to the party' is added to some Modal Base f that comes along with the necessity operator NEC, resulting in a set of possible worlds where Alex comes to the party and some other criteria are fulfilled, f+. The full sentences in (40-a) and (40-b) are statements ABOUT the f+ worlds, in one way or the other. This is where the parallel ends: The ordinary conditional (40-a) has a 'true' consequent property alongside the antecedent. The sentence as a whole claims that 'Sue loses a bet' is true in all (or the most relevant, subsection 2.1.2) of these worlds. The *good*-predication (40-b) on the other hand, has 'It's good' instead, which seems syntactically to be the consequent property. Leaving aside the question of what 'it' refers to here, 'x/p/w is good' is not a true consequent property in (40-b), no matter how we choose the variable. For this would amount to the meaning in (42) for (40-b):

(42) a. (if Alex comes to the party) NEC^f (x/p/w is good)
b. In all the worlds where Alex comes to the party and that are further restricted in some way it is also the case that x/p/w is good.

You see that everything that follows in the paraphrase in (42-b) is restricted by 'In all the worlds where...', capturing the fact that with an ordinary conditional semantics, 'good' in (40-a) would be restricted by the antecedent, and also the standards of goodness should stem from the Modal Base plus antecedent worlds, just like Sue and the bet are from these worlds in (40-a). I.e. if we assume that 'it' refers to such a world, it is said to be good according to its own standards. This is not what happens in 'SPENDING GOOD' nor in 'SPENDING NOT GOOD', since both *gut*-predications in (43) are fine:

(43) a. SCENARIO 'CONFERENCE'

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10.000 euros for a
Luxus-Buffet ausgeben, aber wenn das Buffet dann wirklich
luxury-buffet spend but when the buffet then really
da ist, wissen wir es sicher wieder nicht zu schätzen.
there is know we it surely again not to value
'It would of course be good if we spent 10.000 euros on a luxury buffet, but by the time the buffet really was there, we surely wouldn't value it appropriately, again.'

c. Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10.000 euros for a
Luxus-Buffet ausgeben, obwohl wir es sicher für gut halten
luxury-buffet spend though we it surely for good hold
würden, wenn das Buffet dann da ist.
would when the buffet then there is
'It would of course not be good if we spent 10.000 euros on a luxury buffet, even though by the time the buffet really was there, we surely would find it good.'

In (43-b), the preferences in the 'spending world' are spelled out such that the salient group of people doesn't like the buffet. Still, we can truthfully call this world good - intuitively based on utterance world standards of goodness. Similarly, (43-c) makes clear that the relevant subjects in the 'spending world' would like the fact that the money was spent on the buffet, but the utterance world speaker may disagree. I conclude (applying Sode (2019)'s argumentation to my puzzle) that 'SPENDING GOOD' and 'SPENDING NOT GOOD' must involve NEC (for f) and a regular antecedent, i.e. conditional operators, but the parallel ends there:

(44) (if we spend 10.000 euros on a buffet) NEC^f ???

This seeming mismatch between a conditional appearance on the one hand and and at least a part of the seeming consequent ('good') remaining unrestricted by the antecedent is at the core of question (iii) above.

I won't be able to answer this nor the other two questions, (i) and (ii), from above properly (since the focus of the thesis is to remain on the new empirical puzzle of the compatibility of 'SPENDING GOOD' and 'SPENDING NOT GOOD'), however, Sode (2019)'s treatment of modal *good* gives us some important tools to work with in the discussion.

In the remaining section 2.2, I present only the parts of Sode (2019)'s theory of

good-predications that are relevant for my puzzle. I won't systematically present Sode (2019)'s arguments against Lassiter (2017)'s treatment of the antecedent of *good*-predications as syntactic and semantic propositions and of *good* as parallel to *likely* here, i.e. I won't, for now, dig into the question of whether *good* is actually a predicate of possible worlds, since this is part of the discussion of possible approaches to the puzzle, see section 4.4. Neither am I committed to Sode (2019)'s technical implementation: Any alternative theory that derives the attribution of goodness to possible worlds while maintaining the conditional character of *good*-predications for the choice of Modal Base does the job. From now on, I will assume that German *gut* behaves like English *good* in the relevant respects and apply parts of Sode (2019)'s theory of *good* to *gut* since I'm not aware of any relevant semantic differences between the two.[22]

2.2.2 *good*-predications as conditionals?

We have seen that *good* is parallel to *must* and *can* under their deontic readings in that they introduce a deontic Ordering Source, but *good* seems to lack the other, epistemic, reading of these verbs. Also, the syntax of *good* is totally different than the syntax of *must* and *can*: *good* is an adjective, while *must* and *can* are verbs.

At the same time, we've seen striking parallels between *good*-predications and ordinary conditionals in that they share that the *if*-clause adds another premise to the realistic or empty Modal Base, resulting in $f+$, which is shared by 'SPENDING GOOD', 'SPENDING NOT GOOD' and freshly introduced (47) - a standard conditional:

(45) SCENARIO 'CONFERENCE', IN W*: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

(46) $f+(w^*)$={ There is a linguistics conference; We have 10,000 euros in total to spend for it; We are free to distribute the money between the location, payments and refunds for speakers and food and drinks; **We spend 10,000 euros on a buffet** }

(47) There would be a riot if we spent 10,000 euros on a buffet.

[22] But for a note on the specific behaviour of German subjunctive in these constructions see subsection 3.2.2, and for an outlook on a possible cross-linguistic status of the puzzle see subsection 5.3.1.

Sode (2019) also highlights the parallel between *good*-predications and conditionals in his discussion of what he calls 'conditions of use' following Kratzer (1979): Whether an ordinary conditional features indicative or subjunctive mood influences the situations it can be truthfully uttered in. One example in this pattern is that indicative in both antecedent and consequent may not be used when it is already clear that the antecedent property is false in the world of utterance, i.e. (48) is out if we already know that Alex doesn't come to the party.

(48) (# Alex doesn't come to the party, but:) Sue wins a bet if Alex comes to the party.

Sode (2019) observes that the same holds for *good*-predications:[23]

(49) (# Alex doesn't come to the party, but:) It is good if Alex comes to the party.

Based on the parallel conditions of use, Sode (2019) argues that this component of conditionality must be preserved in an analysis of *good*-predications, contra Lassiter (2017), who takes *good*-predications to be semantically and syntactically proposition embedding, in analogy to *It is likely that p*. Consequently, the clauses embedded under *good* are its propositional arguments for Lassiter (2017), and 'whether a proposition is good' depends on the outcome of a function that assigns all the worlds in which the proposition is true a goodness-value and weights them depending on their probability.[24] Sode (2019) doubts that Lassiter (2017)'s approach to *good*-predications can preserve enough conditional behaviour - my interpretation of Sode (2019): NEC with f; IF adding the antecedent property for f+, see subsections 2.1.1 and 2.2.1 - to explain the parallel conditions of use, nor the role of natural language *if* in many *good*-predications - a strong argument in favour of Sode (2019)'s own analysis that treats *good*-predications as conditional up to a certain point. I anticipated some of Sode (2019)'s argumentation regarding this point in the preceding subsection, when I concluded with the following structure for 'SPENDING GOOD':

(50) (if we spend 10.000 euros on a buffet) NEC^f ???

One of the main reasons why Sode (2019) doesn't go all the way towards a the-

[23] Sode (2019) claims that this holds for the whole pattern of conditions of use, not just this case. I didn't find any case where the conditions of use of a German standard conditional would differ from a *gut*-predication with the same mood. However, both German standard conditionals and *gut*-predications tend to have a looser relation between subjunctive and counterfactuality (subsections 3.2.2 and 3.2.1), which is why I chose this particular example for illustration where German certainly behaves like English.

[24] For the potential of such an approach for my puzzle, see section 4.4.

ory of *good*-predications as conditionals (though he preserves important conditional behaviour via the conditional operators NEC and IF) is that he attests a limit to the parallel in that (51) doesn't usually mean that only in these worlds where Mary recovers, her recovering is desirable, which would be kind of cynical.

(51) It would be good if Mary would recover again. (Sode (2019)'s (23a))

But this is what would be expected if *good*-predications behaved exactly like conditionals (see also the preceding subsection 2.2.1 for another way to put this): In (52), the throwing-a-party is something that is only said to be the case in those possible worlds where Mary recovers again, i.e. it is restricted by the *if*-clause, whereas *good* in (51) isn't.

(52) We would throw a party if Mary would recover again.

This observation is highly relevant for my puzzle, since (43-b) and (43-c), repeated below, show that both sentences of my puzzle have an unshifted interpretation (i.e. *good* is relative to standards of the utterance world, not a world where the antecedent is true), just like (51) above:

(53) a. SCENARIO 'CONFERENCE'

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10.000 euros for a
Luxus-Buffet ausgeben, aber wenn das Buffet dann wirklich
luxury-buffet spend but when the buffet then really
da ist, wissen wir es sicher wieder nicht zu schätzen.
there is know we it surely again not to value
'It would of course be good if we spent 10.000 euros on a luxury buffet, but by the time the buffet really was there, we surely wouldn't value it appropriately, again.'

c. Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10.000 euros for a
Luxus-Buffet ausgeben, obwohl wir es sicher für gut halten
luxury-buffet spend though we it surely for good hold
würden, wenn das Buffet dann da ist.
would when the buffet then there is
'It would of course not be good if we spent 10.000 euros on a luxury buffet, even though by the time the buffet really was there, we surely would find it good.'

Since (51) features subjunctive mood, Sode (2019) takes the shift - that obviously doesn't happen - to be expected if (51) behaved like an ordinary con-

ditional, and calls this the 'mood puzzle' (for a history of this phenomenon, see also the literature cited in Sode (2019)). However, there are also other structures that look like conditionals that arguably show the same behaviour as *good*-predications (see also example (i) in footnote 20):

(54) a. Lisa fände es interessant, wenn sie eine Fledermaus wäre.
Lisa find-SUBJ it interesting if she a bat was
Lisa would find it interesting if she were a bat.

b. Lisa würde es interessant finden, wenn sie wie eine Fledermaus
Lisa would it interesting find if she like a bat
denken würde.
think would
Lisa would find it interesting if she thought like a bat.

Both sentences in (54) are perfectly fine in German. However, bats / people thinking like bats (and Lisa is one / thinks like one in the worlds restricted by the antecedent property!) arguably don't find their being a / thinking like a bat interesting. So the assessment of what is interesting to Lisa must come from the world of utterance, from Lisas ACTUAL preferences, and maybe subjunctive isn't as strongly tied to this shift of the evaluation source anyway.[25]

This might be taken either as an argument that weakens Sode (2019)'s assumption that *good*-predications cannot be ordinary conditionals or as one in favour of a larger class of 'exceptional conditionals' that don't have this shift. At the same time, Sode (2019)'s claim against Lassiter (2017) (see section 4.4) is strengthened, because the parallel to conditionals appears even more far-reaching in the light of other seemingly conditional structures that give rise to the same 'mood puzzle' as described by Sode (2019) for *good*-predications. Sode (2019)'s solution to the 'mood puzzle', however, is closely tied to the specifics of the adjective *good* and does not straightforwardly extend to cases like the ones in (54). I don't know of any previous work that has brought up this requirement.

I will not be able to further discuss this 'broadened mood puzzle' in this thesis, since this thesis focuses on another puzzle: the compatibility of 'SPENDING GOOD'

[25] Sode (p.c., February 2022) agrees that his account is specific for *good* and cannot explain (54-a) and (54-b). He mentions the possibility to analyze *interesting (to Lisa)* in these sentences as modal as well, and of broadening his account of *good*. At the time of finishing this thesis, Sode is working on a version that is based on Heim (1992)'s treatment of desire predicates, see Sode (2022) and Sode (2021).
It seems many such cases of 'untypical conditionals' can be described as 'ergänzende wenn-Sätze' (supplementary *if*-sentences) as first described by Fabricius-Hansen (1980).

and 'SPENDING NOT GOOD'. I therefore don't decide between Sode (2019)'s exact implementation (as described a bit more below, as illustration of one possibility of how to deal with *good*-predications) and other possibilities that are even closer to ordinary conditionals, but take it to be necessary for any theory that modal *good*-predications involve conditional-like Modal Bases restricted by *if*-clauses, analogous to a basic Kratzer-style semantics for conditionals that takes conditional antecendents to be restrictors of overt or covert modal operators, Kratzer (1981, 2012b,a). This is motivated by the attested meaning of *good*-predications as well as their form, and is the first feature (I) of Sode (2019)'s analysis of *good*-predications.

2.2.3 What is a good world?

The second characteristic (II) of Sode (2019)'s theory of *good*-predications is that modal *good* denotes a relation between possible worlds, i.e. it compares them on a contextually salient scale of goodness, and if only one (group of) world(s) is explicitly mentioned - as is the case in standard *good*-predications like my puzzle - they are (via an operator POS) compared to a range of neutral worlds on this scale. This comparison feature of Sode (2019)'s take on *good*-predications readily explains the well-formedness and meaning of sentences like (55), where one world is said to be higher on the scale of goodness than another one:

(55) It is better if we spend the money on a buffet than (it is) if we burn it.

That way, *good* in *good*-predications is treated both as an upper end degree modal in the sense of Kratzer (2012a) ('w is somewhat good/probable', 'w is relevantly high of the goodness/probability scale') and at the same time, modal *good* is treated in analogy to other gradable adjectives and non-modal *good* (e.g. in judgements of taste):

(56) a. The cake is good.
b. The cake is better than the muffin.

This has the obvious advantage of a unified account of all occurrences of *good* as well as of being able to maintain a standard adjective semantics for modal *good* which fits its syntactic properties.

Before going a bit more into detail, let me point out my general stand on characteristics (I) and (II) of Sode (2019)'s account of *good*-predications: I take (I) - conditional operators - to be essential for any such account because of the

parallels to ordinary conditionals discussed above. (II) - Sode (2019)'s lexical entry of *good* - I find merely convenient for the side effects (*better*-sentences, non-modal *good*, ...) but I am not committed to these criteria.

This is because what motivates the exact characterisation of *good* in Sode (2019)'s approach is that he takes the mood puzzle and the unexpected location of the source of evaluation to be characteristic of *good*-predications. I doubt that this is the case (see examples (54-a) and (54-b) above), so a version of (II) that generalizes to a larger class of expressions would have to be assumed anyway:

Sode (2019) aims at a compositional approach to *good*-predications that explains the unshifted interpretation of goodness, and the combination of (I) and (II) - i.e. the way modal *good* and the conditional operator interact in the composition - does this job: The semantics of the positive form of *good* (as sketched in (II), some more details below) come with a type that doesn't go together with the ordinary modal necessity operator (that comes with (I)) the usual way, since this would result in a type mismatch. Instead of Intensional Functional Application, as expected with the intensional operator MUST, Extensional Functional Application happens, resulting in the desired unshifted interpretation. (I am only anticipating at this point as much as necessary to explain the relation between my puzzle and Sode (2019). I refer to Sode (2019) for the full composition but will introduce some characteristic features below.)

However, if we take the availability of unshifted interpretations for ordinary conditionals also with subjunctive mood seriously, we might need a more far-reaching discussion of shifted and unshifted modality anyway, and Sode (2019)'s selling point is lost. On the other hand, it might well be that there is some more general way of getting to Sode (2019)'s type mismatch preventing shifts even without *good*, but I will not follow up on this idea in this thesis due to limitations of space.

Getting back to Sode (2019)'s second characteristic feature (II) - treating *good* in *good*-predications as a modal version of a gradable adjective, comparing possible worlds on a scale -, let's have a look of the specific behaviour of gradable adjectives in general: A paradigmatic example of such an adjective is *tall*. We utter sentences like (57) all the time and we have very clear intuitions about their truth and falsity in a specific situation, just like when we utter (58) which also attributes a property to Alex using an adjective.

(57) Alex is tall.

(58) Alex is married.

But while being married is a stable in-or-out property with clear truth conditions (being in a legally approved couple or something similar), the truth conditions of (57) vary a lot depending on the context, i.e. how tall an individual has to be to count as tall depends on the reference class (tall for a child or a grown-up?) as well as the question under discussion (tall enough to reach the highest shelf?). Along with this context sensitivity comes the vagueness of degree adjectives: Even in a fixed context, there are borderline cases of which we are unsure whether the individual is tall and which have been described (by von Stechow (2006), amongst others; for borderline cases and vagueness in general, see also Solt (2015), Kennedy (2011), a.o.) as lying in a neutral range of neither-tall-nor-not-tall individuals.[26] And degree adjectives - that relate an individual to the degree of a property like height that can be modelled as a scale - are gradable, i.e. they allow for comparison as in (59) or (60).

(59) Alex is taller / less tall than Toni.

(60) Alex is rather tall, but Toni is very tall.

Sode (2019) follows von Stechow (2006) in his assumptions about the relational semantics of gradable adjectives and their positive (not comparative, not superlative) forms. According to von Stechow (2006), the positive form of a degree adjective comes with a POS-operator that fixes the range of individuals that are neutral on the relevant scale (e.g. neither tall nor not tall) and compares the individual (which the adjective property is attributed to) to this neutral interval N(S) such that (61-a) is true iff (61-b).[27]

(61) a. Alex is tall.

b. The maximal degree of tallness assigned to Toni by the HEIGHT-function is higher than any degree of tallness on the neutral interval.

[26] This assumption does not settle the ongoing discussion about the vagueness of degree adjectives or vagueness in general. Not only are there in-between cases, theories of vagueness also have to face the Sorites paradox: We all agree that a person with a height of 2 meters is tall, and we agree that if a person is tall, another person who is just 1 millimeter smaller is also tall. But repeat this and you're committed to saying that a 110 centimeters tall grown-up is tall. This behaviour is the same for *good*-predications, which strengthens Sode (2019)'s parallel: Change a tiny detail about a good world and it will still be good, but change one tiny detail after the other... All theories of vagueness face this challenge, so we might as well follow von Stechow (2006), like Sode (2019) does, for the purpose of this thesis.

[27] For an early account of degree adjectives that makes use of POS, see Cresswell (1976); for empirical arguments for degrees as intervals see Kennedy (2001), a.o.

The meaning of *tall* is given in (62-a), where g(S) is a contextually salient subinterval on the tallness scale S for individuals that is introduced by *tall*. At this point the interval g(S) is not further specified, it may e.g. be the height of another person (which is useful for comparatives). Under von Stechow (2006)'s account of degree adjectives that Sode (2019) uses, this subinterval is provided by an operator that covertly accompanies the positive form, POS, in sentences like (61-a) above. The semantics of POS are given in (62-b), where S is a scale - specified for tallness only in combination with *tall* - and N is a neutral interval, N(S) the neutral interval on this scale.

(62) a. $[\![\mathbf{tall}_S]\!]^g = \lambda d\colon d \in g(S) \wedge g(S) \subseteq S_{\mathbf{tall}}.\ \lambda x \in D_e.\ \text{HEIGHT}(x) \geq d$

b. $[\![\text{POS}_{N,S}]\!]^g = \lambda A_{\langle d,t\rangle}.\ \forall d \in N(S)\colon A(d)$ von Stechow (2006)

I.e. ordinary degree adjectives always compare individuals to other individuals on a contextually given scale, only that in the case of a positive form, the relevant comparison class are individuals within a neutral interval of the scale, i.e. N(S) takes the place of the more general g(S). von Stechow (2006) extends this picture by simply exchanging individuals for times in order to explain the semantic behaviour of *spät* (late), i.e. he sets a precedent for degree adjectives to be attributed to something other than individuals, in principle.

Sode (2019) uses this idea by claiming that modal *good* is attributed to possible worlds instead of individuals (*tall*) or times (*spät* (late)) but otherwise plays the same role, i.e. it is a degree adjective, which also explains its gradability, (63), and context sensitivity (in a discussion about the basis of morality (64) is probably not accepted as true).

(63) a. It's better if p than if q.
b. It's best if p.
c. It's very good if p.

(64) It's good if Alex comes to the party.

According to Sode (2019), modal *good* expresses a relation between worlds according to an ideal specified by the context, parallel to the question of what counts as tall for individuals. This is where Kratzer (1977, 1981, 1986, 1991, 2012b)'s Ordering Source comes into play [28]: The ideal is given by a conver-

[28] Sode (2019) uses three Conversational Backgrounds, one Modal Base and two Ordering Sources, one from the conditional and a deontic one that comes with *good*. Whenever I speak of 'the' Ordering Source, I'm talking about the deontic one. On the possibility of more than two Conversational Backgrounds, see footnote 20 and subsection 5.2.3.

sational background which might be deontic, teleological or bouletic for *good*. Sode (2019)'s semantics of modal *good* is given in (65), where f is a conversational background (attention, conventionally, Ordering Sources are represented by g!), w is the world of utterance, *f(w)* the Ordering Source according to the standards of w, and w' is a world to which w" is compared. 'x $\leq_{f(w)}$ y' in this notation means that x is not further from an ideal given by f(w) than y.[29]

(65) $[\![\textbf{good}]\!]^f = \lambda w.\ \lambda w'.\ \lambda w''.\ w'' \leq_{f(w)} w'$ (=Sode (2019)'s (39))

In the case of the positive form, a POS □ operator (the modal version of POS) additionally introduces the neutral interval of neither-good-nor-bad worlds - the semantics for 'POS □ good' are given in (66).

(66) $[\![\text{POS}_{\Box}\ \textbf{good}]\!]^f = \lambda w.\ \lambda w'.\ \forall w'' \in \text{NEUTRAL}_{w,\leq_{f(w)}}\colon w' \leq_{f(w)} w''$
(Sode (2019)'s (41))

A given world is compared to these neutral worlds such that the world in question, w', is good iff it is better according to the ideal given by the Ordering Source than any world w" in the neutral domain of worlds that are neither good nor bad,[30] i.e. (67-a) is true iff (67-b).

(67) a. w' is good.
b. The maximal degree of goodness assigned to w' by the GOODNESS-function is higher than any degree of goodness on the neutral interval.

The last step for a full picture of Sode (2019)'s account is the combination of $\text{POS}_{\Box}$ **good** on the one hand and the modal operations NEC (with the Modal Base) and IF (with the antecedent property) on the other hand. The rough idea is that the conditional part of *good*-predications provides w' above, i.e. specifies which world(s) is/are located on the scale of goodness. The conditional operator introduces universal quantification over these worlds like is does in the case of an ordinary conditional. The full compositional meaning of *good*-predications

[29] Whenever the direction of ≤ doesn't match the paraphrase, remember that each scale has an equivalent that expresses the same in the other 'direction' and adjust the paraphrase accordingly.

[30] Sode (2019)'s neutral interval may seem a nice way out of the puzzle in the sense that good and bad are not binary options anymore so maybe the binary opposition the puzzle is built on doesn't even hold anymore. But note that in the case of my puzzle, it is not the case that the world described by the context (we spend 10,000 euros on a buffet, we only have 10,000 euros,...) is neither good nor bad. On the contrary: It is in one sense clearly good and in another sense clearly bad.

is given in (68).[31, 32]

(68) $[\![(\textbf{if } \alpha) \text{ NEC } [\text{ POS}_{\Box} \textbf{ good }]]\!]^h = \lambda w.\ \forall w' \in \|\alpha\|\text{: } \forall w'' \in \text{NEUTRAL}_{w,\leq_{h(w)}}\text{: } w' \leq_{h(w)} w''$ [33]

'Every $\|\alpha\|$-world lies above the neutral range of worlds according to an ideal determined by the conversational background h in the world of evaluation w.' (Sode (2019)'s (48))

So, what Sode (2019) does is combine a semantics for *good* as a degree adjective of worlds with a standard semantics for the POS operator in analogy to other positive forms of degree adjectives. A problem that arises for (68) and that I only mentioned briefly before is that the semantic types of the classical conditional operator ($\langle s, \langle\langle s,t\rangle, t\rangle\rangle$) and ($\text{POS}_{\Box}$ good) ($\langle s, \langle s,t\rangle\rangle$) cannot be combined via Intensional Functional application (69) though NEC is usually an intensional operator that combines with its prejacent in this way.

(69) Intensional Functional Application (=IFA)
$[\![(\alpha\ \beta)]\!] = \lambda w.\ [\![\alpha]\!](w)([\![\beta]\!])$

Sode (2019) argues NEC is not intensional in this case - because it cannot be because of the semantics of ($\text{POS}_{\Box}$ good) - and Extensional (70) instead of Intensional Functional Application applies, ultimately yielding (68) (see Sode (2019) for the full composition).

(70) Extensional Functional Application (=EFA)
$[\![(\alpha\ \beta)]\!] = \lambda w.\ [\![\alpha]\!](w)([\![\beta]\!](w))$

The intensional component that is lost relates directly to the shift to the an-

[31] For the case of empty Conversational Backgrounds except the deontic Ordering Source, i.e. not considering what I've been calling the Modal Base.

[32] How many w' worlds there are to be quantified over might vary between different kinds of *good*-predications. A TOTALLY realistic modal background for *good*-predications or a very restrictive second, stereotypical Ordering Source might even lead to the result that there is only one w' in a given case. A realistic, but not totally realistic, Modal Base on the other hand would only require of the worlds considered that SOME things are as in the utterance world, so more worlds would 'pass' and be further restricted by the antecedent. The analogy to individuals in the case of *tall* and an extension for plurals might be insightful, i.e. (i) as parallel to (ii). I will not do this work here.

(i) The MB worlds are good.

(ii) The boys are tall.

[33] NEUTRAL is relative to two parameters, w and $\leq_{h(w)}$ because the relevant question is what counts as neutral in w AND relative to a relation that is in this case also specified in w; but as I understand the notion, in principle a world could also count as neutral in w according to the standards of w'. I cannot think of any case where this is relevant, though.

tecedent world(s) that doesn't happen in *good*-predications as opposed to ordinary conditionals, so Sode (2019) uses an apparent weakness of his account - the potential type mismatch - as an explanation for his initial 'mood puzzle'. Sode (2019) assumes that the unshifted interpretation is typical of *good*-predications as opposed to ordinary conditionals. As I argued above, I take the shifted/unshifted problem to be a more general one, so I will not give Sode (2019)'s full composition here since it is not necessary for an understanding of my puzzle.

What is important to take along from Sode (2019) is that there are - with conditionality and the Modal Base related to it on the one hand and the neutral interval that comes with the POS operator on the other hand - two possible sources of vagueness built into the analysis. While context sensitivity doesn't seem to play a role for my puzzle (the context is stable between both examples), vagueness might, and promising places to look for it are the Modal Base as well as the deontic Ordering Source that comes with *good*. I will do so in sections 4.5 and 4.6.

We are now in a position to enrich our initial informal paraphrase of 'SPENDING NOT GOOD' and 'SPENDING GOOD' by the means of Modal Base, Ordering Source and the neutral interval:

(71) Given the circumstances (that we only have 10.000 euros in total, that speakers won't give talks without refunds, that we don't win additional money in the lottery, ... = MB), the world in which we DO spend 10.000 euros on the buffet is (/ is NOT) higher on the scale of goodness in terms of success of the conference (= OS) than are neutral worlds.

Taken together, this predicts the truth of 'SPENDING NOT GOOD' but not of 'SPENDING GOOD', but it contains hints as to where we might start looking for the solution.

3 A closer look to the puzzle

We now have a set of tools for the description of *good*-predications available that correctly predicts the truth of 'SPENDING NOT GOOD' in SCENARIO 'CONFERENCE'. At the same time, we've got an idea of where to look for the problem in the case of 'SPENDING GOOD'. In this chapter, I will go back to the puzzle and take a closer look at its specifics and semantic behaviour, some of which will reveal additional arguments for the decision between concurring approaches in the main discussion in chapter 4.

3.1 Distinctions from other modal puzzles

Modal puzzles are a phenomenon in itself within the field of semantics, their huge variety following from the relatively non-canonic state of modal semantics as well as the context dependency and vagueness of modal expressions and the close relation to pragmatics as well as philosophy that is one of the features of the science of modality. While I am not aware of any modal puzzle that resembles the problem of 'overall' versus 'partial' goodness my puzzle points to, I cannot give a full discussion of possibly related modal puzzles here nor exclude the possibility that one or more of these other puzzles may be solved by a solution to my puzzle and vice versa - actually, that would be very welcome in the spirit of unification. As for the discussion of whether my puzzle points to a broader phenomenon of modality, see also section 5.3. At this point, I will leave it at highlighting two specifics of my puzzle by comparison to one other group of modal puzzles, respectively: First, my puzzle does not involve uncertainty of outcomes and therefore doesn't require probability functions, and secondly, there are no clear update effects as in the case of Sobel Sequences nor does comparative semantics alone do the job as has been argued in the case of conflicting wishes.

3.1.1 No Uncertainty

Many modal puzzles contain some kind of uncertainty of outcomes, i.e. the decision maker, belief holder, the person who wants something isn't fully aware of the consequences of their decisions or of what would happen if their wishes came true. This might be due to an outside factor - no one can know, coincidence plays a huge role, e.g. at the roulette table - or ignorance specific for the attitude holder / decision maker. A frequently discussed example of the latter case is the miners puzzle, discussed in a version on *ought* by Kolodny & MacFarlane (2010):

(72) Ten miners are trapped either in shaft A or in shaft B, but we do not know which. Flood waters threaten to flood the shafts. We have enough sandbags to block one shaft, but not both. If we block one shaft, all the water will go into the other shaft, killing any miners inside it. If we block neither shaft, both shafts will fill halfway with water, and just one miner, the lowest in the shaft, will be killed. (Kolodny & MacFarlane (2010), pages 155ff)

The crucial role our belief state plays for modal statements - in this case for the question of what we ought to do - becomes very clear in this artificial scenario,

where: If we block shaft A, 10 or no miners are killed, depending on where they are, and the same holds for blocking shaft B; if we block neither shaft, we are accepting the death of one miner for certain while the others are saved. Intuitions are very clear in this case that we ought to not block any shaft in order to avoid a 50 percent chance of killing 10 miners. This might be modelled by an expected outcome account where weighting both possible outcomes half, we 'expect' 5 miners to die if we block any of the shafts (even though in none of the possible outcomes do 5 miners die, so this is a weirdly technical notion of expectation, taken from decision theory), which is worse than the certain death of one miner. Why is this not captured by a standard modal semantics? Well, the only possible worlds that are close enough to the utterance world to be even considered are such that all miners are in shaft A - then we ought to block this shaft - or all miners are in shaft B - then we ought to block that one. In no accessible world is it the case that blocking neither shaft is a good idea, since we are unnecessarily (had we known where they are) killing a person by doing so.

One of the reactions to this puzzle is Cariani et al. (2013)'s introduction of a third type of conversational background, the Decision Problem δ, that allows to account for the agent's epistemic status and predicts the correct outcome for Kolodny & MacFarlane (2010)'s version of the miners puzzle (and probably many or all other puzzles involving agent uncertainty).

Cariani et al. (2013) (page 246) appeal to the intuition that in (72) 'blocking shaft A and blocking shaft B are among the choices they have, but blocking the shaft in which the miners are is not.' Their Decision Problem identifies at each world the set of actions available to the agents, where actions are propositions which are mutually exclusive relative to the modal background. For the world w of (72), the Decision Problem δ is as follows:

(73) δ(w) = { we block shaft A, we block shaft B, we block neither shaft }

By combining an epistemic Modal Base f with the decision problem δ, a new conversational background emerges that may intuitively be described as a filtered Modal Base that then combines with the regular Ordering Source. Each action (e.g. blocking shaft A) is associated with a set of worlds that are compatible outcomes of taking that action (given the information state), whereas 'a cell cannot be better than its worst conceivable outcome (in light of the agent's information)'.[34]

[34]Cariani et al. (2013) defend the fact that their account is only sensitive to those priorities that can be guaranteed against the objection that this is guidance by the worst case. They present

So, the basic idea is that the decision problem combines with the traditional Modal Base, the resulting filtered Decision Problem interacting with the Ordering Source, leading to an outcome ordering that resembles what some accounts within decision theory predict to be the best action. Cariani et al. (2013) point out that their solution is a conservative extension to Kratzer (1977, 1981, 1986, 1991, 2012b)'s system, since in classical cases the decision problem doesn't have any effect and the Modal Base and Ordering Source can just do their regular job, leading to all the expected normal outcomes from a standard Kratzer (1977, 1981, 1986, 1991, 2012b) modal semantics. [35]

What puzzles like the miners puzzle intuitively share with my puzzle is that both types of puzzles seem to involve 'ignorance' of some information from the utterance world, i.e. something clearly is the case from an objective point of view - the miners are actually, say, in shaft B; spending 10,000 dollars of a buffet leads to no talks - but somehow doesn't make it into the assessment of the modal statement. [36] However, there are two crucial differences between probability puzzles and the puzzle that is at the center of this thesis:

First, the reason why this context information is ignored is more obvious in probability puzzles: because the subjects who must make the decision don't have that information. So, any account of these puzzles will be concerned with the question of how to implement changes to classical modal semantics such that this relativisation / taking the decision maker's standpoint is built into it while possibly maintaining a circumstancial Modal Base. The status of my puzzle is at a more basic stage: Before trying to model anything, we must find an accurate description of what makes this 'bit of information' ignorable in the first place - after all, every relevant subject knows all about the possible outcomes in my puzzle, and they are certain that spending 10,000 dollars will lead to no talks.

Secondly, in the case of the miners puzzle in the above form (and many other probability puzzles), what I've simplistically called ignorance plays a very different role than it does in my puzzle: In the case of the miners puzzle, the

a way of providing more flexibility and modelling expected utilities.

[35] Other approaches to uncertainty/probability puzzles vary in how much they change Kratzer (1977, 1981, 1986, 1991, 2012b)'s original approach and in to which puzzles they react. I cannot discuss any of them here, but mention Yalcin (2007)'s information parameter as well as Lassiter (2017)'s weighted probability function. Lassiter (2017), in his subsection 7.7.3, also gives a nice overview of modal puzzles involving probabilities.

[36] To be precise, this is only one possible description of my puzzle that already points in the direction of my favoured solution strategy, a Modal Base based account, see section 4.6.

decision makers are aware of their own ignorance (in the sense of not knowing something) and reflecting on it in a way that leads to acting as if killing 5 miners (the 'expected' outcome) were the consequence on which to base the decision - over-simplifying, they consider only a possible world that isn't even possible - but by doing so, they arrive at a decision (blocking no shaft) that most people find intuitively the right decision. They are acting in line with actual (in this case ethical) preferences, as (74) correctly describes, leaving linguistics with the challenge of modelling this within modal semantics.

(74) We ought to block no shaft.

In my puzzle, on the other hand, people seem to 'forget' or ignore (in the sense of not taking into consideration) information they already have (the limited budget), leading to an outcome in 'SPENDING GOOD' that 'strictly speaking' isn't the right one from the point of actual preferences. To put this differently, the decision makers in the miners puzzle consider everything they can - even their own ignorance - to arrive at a decision they are actually willing to act on; while the decision makers in my puzzle have all the information but for some reason only use part of it to arrive at a statement that seems to suggest something they would never act upon.

It is in general possible that one and the same extension/change to a Kratzer (1977, 1981, 1986, 1991, 2012b) modal semantics might deal with both problems - via some general principle of fading in and out context information relative to multiple factors one of which is epistemic accessibility -, but accounts to probability puzzles known to me explicitly don't. Their goal is generally to build probability into modal semantics, while generating the same results as Kratzer (1977, 1981, 1986, 1991, 2012b) for all cases with clear outcomes, see Cariani et al. (2013) amongst others.

3.1.2 Update effects?

The other main field of modal puzzles has to do with something commonly referred to as update effects - meaning (i) a change in the discourse, and in a broader sense also (ii) an unexpected choice; regarding which possible worlds are considered for Conversational Backgrounds. This is a very loose class of phenomena which don't necessarily have to be dealt with in parallel. Instances of (i) are usually summed up as Sobel Sequences, a commonly discussed case of (ii) are conflicting wishes. The reason why I am discussing both at once is that the comparison allows for a nice contrast between these two puzzles on the

one hand and my puzzle on the other hand while leaving open the possibility that all three phenomena might be instances of some more deeply connected modal phenomenon. Anticipating my position on the relation between Sobel Sequences, conflicting wishes and my puzzle, I find it much more natural than in the case of probability puzzles to pursue a unified mechanism behind all three. Nonetheless, there are important differences between these cases, and if a unified analysis is to be found, the specifics of my puzzle have to be considered, i.e. standard answers to Sobel Sequences or conflicting wishes don't do the job straightforwardly. Also, the term 'update effects' would be misleading for such a unified account since it suggests a temporal sequence that is only clearly there in the case of Sobel Sequences.

Sobel Sequenques are named after Sobel (1970) who is said to have been the first to mention a puzzle of this form, and have found their way into the discussion in modal semantics in Lewis (1973). There is recent discussion on whether Sobel (1970)'s and Lewis (1973)'s cases are really the same phenomenon, and on whether Sobel Sequences are a useful class to work with at all (see Klecha (2015), Ippolito (2020), amongst others), but since I am about to address (without answering it) the question of whether even MORE phenomena - conflicting wishes, overall/partial goodness - might be dealt with in analogy to Sobel Sequences, I will set this question aside, leaving it with the popular comment that much more work is to be done in this field, and giving a version of the standard example of a Sobel Sequence (Lewis (1973)):

(75) If the U.S. threw all its nuclear weapons into the sea, there would be war; but if all nations with nuclear weapons threw them into the sea, there would be peace.

This is a sequence of two conditionals which is intuitively acceptable but shouldn't be at first sight: The U.S. are a nation, so all worlds where all nations throw their nuclear weapons into the sea are such that the U.S. throw their weapons into the sea. However, the first conditional states that (all / all selected by the Modal Base) U.S.-disarmament worlds are war worlds, so there are at least some war worlds in the set of (all / all selected by the Modal Base) all-nations-disarmament worlds - which isn't compatible with them (all / all selected by the Modal Base) being peace worlds as the second conditional suggests.

What I put in brackets above is already a step towards the solution: While this has originally been discussed for ALL possible worlds in the sense of condi-

tionals as strict implication, we have already seen in section 2.1 that we don't get far with this in modal semantics anyway. However, the problem remains if we assume one and the same Modal Base and Ordering Source for both conditionals in (75): We restrict the possible worlds to those that are relevantly similar to the utterance world AND nothing absurd happens AND where all nations throw their nuclear weapons into the sea, and we arrive at peace worlds; we do the same for the U.S. throwing their weapons into the sea with the exact same restrictions on possible worlds considered and we should arrive at peace worlds, too, because this follows logically from the other conditional. The obvious solution is that the two conditionals in (75) don't share both Conversational Backgrounds. For the first sentence, the Modal Base or a stereotypical Ordering Source restricts the worlds that are quantified over to worlds that are relevantly close to the utterance world - all other nations also throwing away their nuclear weapons is just too far off and therefore not considered so that the first sentence receives a reading like (76):

(76) If **only the U.S.** threw their nuclear weapons into the sea, there would be war.

This is perfectly compatible with the second sentence which considers only worlds where ALL nations throw their nuclear weapons away, so the two conditionals are logically detached now. The change in Conversational Backgrounds during the discourse that happens here is a specific kind of context shift that has been called an update effect and can be assumed to be triggered by every new conditional sentence. There have been different varieties of a solution along these lines, and there are types of Sobel Sequences that still pose a problem today, but the classic case is explained sufficiently in modern modal semantics.

This resembles my puzzle in some important respects: There are no uncertainties involved, the speaker knows everything, but still they use different Conversational Backgrounds in the same situation, arriving at statements that seem incompatible but are only so if we assume the same Conversational Backgrounds. However, 'SPENDING GOOD' and 'SPENDING NOT GOOD' are alternatives either of which might be uttered in the very same context. Actually, my intuition is that while Sobel Sequences serve their communicative function best when they really are a sequence, my sentences, 'SPENDING GOOD' and 'SPENDING NOT GOOD', become unacceptable when they are conjoined this way:

(77) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, pay-

ments and refunds for speakers and food and drinks. Our primary interest is the *linguistic* success of the conference (i.e. that there are good talks).

b. #Es wäre natürlich nicht gut, wenn wir 10.000 Euro für
it would-be of-course not good if we 10,000 euros for
ein Luxus-Buffet ausgeben. (Denn dann gibt es leider keine
a luxury-buffet spend because then gives it sadly no
Talks.) Aber es wäre natürlich gut, wenn wir [10.000
talks but it would-be of-course good if we [10.000
Euro für ein Luxus-Buffet ausgeben / das tun](, denn dann
euros for a luxury-buffet spend / that do] because then
gibt es großartiges Essen).
gives it great food
'It would of course not be good if we spent 10,000 euros on a luxury buffet, (because unfortunately there are no talks then). But it would of course be good if we [spent 10.000 euros on a luxury buffet / did so] (because there would be great food then).'

In the case of Sobel Sequences, the antecedent of the two sentences is different and plays a role in the choice of Conversational Backgrounds. Also, the point where the change happens can be determined easily in these cases: An update of one of the Conversational Backgrounds happens 'between' the two conditionals. Now, if one were to explain my puzzle in analogy, a number of non-trivial questions would have to be answered: (i) What triggers the different choices when there is no overt difference in antecedent nor scenario? Or (ii), if nothing triggers it but the two options are just always available, how are they restricted, i.e. why aren't there endless random Conversational Backgrounds? (This will be crucial for the discussion in chapter 4.) And, a terminological point, (iii) should we still call this then very broad phenomenon an 'update'?

A version of all three of these questions is also raised by a class of modal puzzles summed up as puzzles on conflicting wishes,[37] so looking into this type of puzzle is promising on the search for a broader phenomenon. Here are two

[37] I thank an anonymous reviewer of Sinn und Bedeutung for pointing out Phillips-Brown (2018)'s work on conflicting wishes to me, and Magdalena Kaufmann, Frank Sode, Sarah Zobel and an anonymous reviewer of Sinn and Bedeutung for stressing the parallel between my puzzle and conflicting wishes in general and Heim (1992) in particular.

Sode (2019) notes a general semantic parallel between *good*-predications and desire reports, citing Heim (1992)'s observation that there is a 'conditional in every desire report'. This points in the direction of a whole class of modal phenomena, possibly restricted to those with deontic Ordering Sources, that share properties such ambiguity between state and desire readings (Sode, p.c., February 2022), the mood puzzle introduced in 2.2 and my puzzle. Further investigation is needed.

examples:

(78) a. CONTEXT: In worlds that are compatible with everything I desire I [...] don't teach at all. [...] I believe that I will teach (a regular course load) next semester. (taken from the continuous text, Heim (1992), p. 195)

b. I want to teach Tuesdays and Thursdays next semester. (=Heim (1992)'s (33))

(79) a. CONTEXT: The Who are performing tonight, and Al's parents are deciding whether to take the long drive to the concert. Al knows that he'll see the concert only if he takes the drive, and he knows that he'll see the concert if he takes the drive. Al loves The Who, but he gets very carsick, and the drive isn't at all worth it. Al begs his parents to not take the drive. (taken from the continuous text, Phillips-Brown (2018), p. 951)

b. Al wants to see the concert. (=Phillips-Brown (2018)'s (1))

c. But Al doesn't want to take the long drive. (=Phillips-Brown (2018)'s (2))

Here, a parallel to my puzzle is obvious and in contrast to Sobel Sequences: Sobel sequences can be continued endlessly in theory, i.e. it is always possible to use an even more restricted antecedent to change the Conversational backgrounds over and over, no one 'size' of Modal Base or Ordering Source is special in any way. When it comes to conflicting wishes (or, in the case of (79) and Phillips-Brown (2018), what they call 'strongly conflicting desire ascriptions'), there is a clear overall / everything considered preference that is contrasted with a partial / some-things-considered (term by Phillips-Brown (2018)) preference. In the case of Heim (1992)'s (78), this is only implicit in the context (but it is perfectly fine to add that I don't want to teach, expressing the overall perference) while (78-b) expresses the partial wish. As for Phillips-Brown (2018)'s (79), (79-b) is the overall wish and (79-a) the partial one. So, both b-sentences above are instances of a wish that 'ignores' some utterance world factors - as does my 'SPENDING GOOD' for goodness. Since the Ordering Source is deontic in these cases - as well as in my puzzle: another striking parallel! -, it seems most intuitive to me to let the Modal Base do this job, but see chapter 4 as well as Phillips-Brown (2018)'s arguments for a discussion.

It would be very welcome - because of these parallels and for methodological reasons - if an account that deals with both conflicting wishes and my puzzle

could be found. I am optimistic that the account I will give at the end of this thesis for *good*-predications could do the job with some generalisations. However, I won't do so in this thesis (but see also section 5.3). But why not take an existing account for conflicting wishes and apply it to my puzzle straightforwardly? The solutions to conflicting wishes puzzles that I know of don't manage do the job:

Note that if it really were the case that puzzles concerning conflicting wishes and my puzzle are instances of the same phenomenon of overall versus partial preferences, I am to my knowledge the first person who discusses it for another modal expression than wish/want-ascriptions.[38] Naturally then, existing accounts have linked this behaviour to semantic specifics of wishing and wanting. E.g. Phillips-Brown (2018) argues that in order to capture (79), we have to give up on treating *want* as a deontic modal. His account aims at capturing the extent to which belief influences desire by assuming that desire is a 'three-place relation between an agent, a proposition, and what the agent is considering' (Phillips-Brown (2018) p. 961), where the latter is formalized via questions and 'coarse worlds' (worlds that are underspecified wrt. the truth of some propositions). Extending such a framework to *good*-predications has to assume they are desire reports - i.e. *It's good that/if p* is always relative to the speaker, meaning *I find it good that/if p*, which seems to miss out on something, intuitively. *good* could not be analyzed as a deontic modal anymore under an extended Phillips-Brown (2018) account, in analogy to *want*. I can imagine that this broadening is possible, but it certainly remains an open issue.

A comparative modal semantics as proposed by Heim (1992) as a solution to (78), on the other hand, is more easily applicable to other modal constructions and might be more open for unification, potentially, but on the other hand it is not clear to me how such an account would avoid over-generalization. What *want* does, according to Heim (1992), is relating belief worlds that are maximally similar to the utterance world and where the antecedent property is the case (we spend the money on a buffet) - i.e. worlds that we believe will come about when the antecedent is true - to ones where the antecedent property is not the case and that are also maximally similar to the utterance world.

(80) a. $[\![\alpha \text{ wants } \phi]\!](w) = 1$ iff for every w' $\in \text{Dox}_\alpha(w)$,
$\text{Sim}_{w'}([\![\phi]\!]) <_{\alpha,w} \text{Sim}_{w'}([\![W \backslash \phi]\!])$ (= Heim (1992)'s (37))

[38] Note, however, that *good*-predications and desire reports might form a class also wrt. other phenomena, see Sode (2019, 2021, 2022), Heim (1992), so this might actually be worth working out in the future.

b. An individual α wants a proposition ϕ iff amongst all worlds w' - that are in the set of doxastic alternatives of α in the utterance world - the world that is maximally similar to the utterance world and where ϕ is true is more desirable to α than the maximally similar world where ϕ isn't true.

I.e. (81-a) roughly receives a meaning along the paraphrase in (81-b) under Heim (1992)'s account, i.e. there is 'a hidden conditional in every desire report':

(81) a. I want you to leave.

b. The world (maximally similar to the actual world) I believe I will be in if you leave is more desirable to me than the world (maximally similar to the actual world) I believe I will be in if you don't leave.

In its unspecified version, Heim (1992)'s account takes it for granted that the similarity relation Sim provides a clear ranking for both the believe worlds with and without ϕ, with the option of more than one world on the same rank, in principle. Now remember the puzzle on 'SPENDING GOOD' and 'SPENDING NOT GOOD':

(82) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. 'SPENDING GOOD':

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks

'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. 'SPENDING NOT GOOD':

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks

'It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

For the antecedent proposition of 'SPENDING GOOD', 'we spend 10.000 euros on a luxury buffet', this is quite straightforward: By far the most probable outcome of doing so is that we will have a great buffet but no talks. The world where this is the case and that is otherwise like the utterance world will rank highest wrt. similarity. In a next step, however, this world will have to be compared to another world - and here it gets messy: What definitely has to be the case in this second world is that we don't spend the money on a buffet. However, 'we don't spend the money on a buffet' is extremely under-specified: It is the case in worlds where we do nothing with the money as well as worlds where we spend most of it on speakers. Now in order for the semantics in (81) to predict anything in this case, we'll have to decide what to assume: (i) a world where we do nothing with the money is the closest 'we don't spend the money on a buffet' world, (ii) a world where we spend most of the money on speakers is the closest 'we don't spend the money on a buffet' world, or (iii) these two worlds are equally similar to the utterance world.
If we assume (i), we predict the acceptability of 'SPENDING GOOD' because a world with a great buffet and no talks is superior to a world with neither of the two. However, the truth of 'SPENDING NOT GOOD' isn't predicted now, without further assumptions; and over-generalization is a real threat (because most everything is better than doing nothing with the money, see section 4.2).
If we assume (ii), as seems most plausible, we predict 'SPENDING NOT GOOD' to be true, but 'SPENDING GOOD' to be false, because we compare the world with a great buffet but no talks to a world with no / an average buffet but great talks, then.
(iii) doesn't predict the truth of either of the sentences, because it isn't true that every maximally similar not-ϕ world is better than the maximally similar ϕ world; and it isn't true either that every not-not-ϕ world is better than every not-ϕ world. (But this is my interpretation; it depends on how the negation is understood; anyhow, it is not possible to explain the truth of both 'SPENDING NOT GOOD' and 'SPENDING GOOD' via (iii).)
There could in principle be a fourth option (iv) that allows the maximally similar 'we don't spend the money on a buffet' world to be (i) in the case of 'SPENDING GOOD' and (ii) in the case of 'SPENDING NOT GOOD'. However, this requires either two different domains of doxastic alternatives (amounting to different Modal Bases, see section 4.6) or a similarity relation that does not deliver one value per utterance world and proposition, which would not be a function, and which would make predictions for other cases impossible.

So the way Heim (1992) tackles the problem - via maximal similarity to the utterance world - isn't helping in the case of my puzzle: Which belief world is

closer to the world of utterance: the one where we don't spend the money at all, or the one where we don't spend it on the luxury buffet, but some on speakers and some on another buffet? Not only is this question extremely hard to decide - similar by which standards? - but any one answer remains insufficient, since both choices must be available to predict the outcome of my puzzle: Only if the world where we don't spend the money at all is most similar (of the no-luxury-buffet-worlds) to the world of utterance, is 'SPENDING GOOD' predicted to be acceptable; and only if the world where we spend the money in a reasonable way is most similar, is the acceptability of 'SPENDING NOT GOOD' predicted. At the same time, speakers of the two sentences don't need to have any disagreement on plausible outcomes or preferences (see section 3.3). And if we take these worlds to have the same, maximal, level of similarity to the world of utterance: Which other worlds are not 'maximally similar'? Why don't we attribute goodness more freely, to even more worlds? I.e. we come back to the question of restriction. [39]

3.2 Variations of the puzzle

After the introduction of the puzzle, I introduced the relevant tools for a description of *good*-predications in general (chapter 2) and refined the paraphrase of 'SPENDING NOT GOOD', the acceptability of which is now sufficiently explained for my purposes. The acceptability of 'SPENDING GOOD', on the other hand, remains unpredicted so far. I have returned to the puzzle for a comparison with some other modal puzzles in section 3.1 and concluded that conflicting wishes might be closely related, but existing accounts don't straightforwardly extend to my puzzle. The next step will be to pin down which properties of 'SPENDING GOOD' are necessary for the puzzle to appear, and which variations of the puzzle might lead to its disappearance. The upcoming discussion of different variations of the puzzle will help us collect requirements for possible solutions to the puzzle.

[39] This discussion is based on a comment by an anonymous reviewer for Sinn and Bedeutung who claims that a comparative semantics "would make sense of the data by saying that ['SPENDING GOOD', E.E.R.] compares spending all the money on the banquet to not, while ['SPENDING NOT GOOD', E.E.R.] compares spending it all on the banquet to spending some on the banquet and some on the speakers". I thank them for pointing out the importance of discussing this possible approach. At the same time, I insist that this is too unrestricted: There is no rule given (at least in the literature on comparative semantics known to me) as to which comparisons are possible and which are not, see also section 4.2.

3.2.1 Factivity and counterfactuality

In the original examples 'SPENDING GOOD' and 'SPENDING NOT GOOD' as presented in section 1.2, the truth value of the embedded sentence - *(wenn) wir 10.000 Euro für ein Luxus-Buffet ausgeben* - is unsettled, i.e. it is not clear how the money is spent. This might be different for the English translation '(if) we spent 10,000 euros on a luxury buffet'. *wäre* (would be), the subjunctive ('Konjunktiv II') form of *ist* (is), in the matrix sentence / consequent does not determine whether the proposition expressed by the embedded sentence / antecedent is true; nor does it necessarily require a corresponding subjunctive verb form in the embedded sentence, as the acceptability of 'SPENDING GOOD' and 'SPENDING NOT GOOD' shows. So, when we utter 'SPENDING GOOD' or 'SPENDING NOT GOOD' in German, there is no counterfactual flavour whatsoever, i.e. we may have no idea as to whether we'll actually spend the money on a luxury buffet. We simply make a statement about a certain group of possible worlds where we do so, regardless of whether the actual world will be such a world. Therefore, it is worth contrasting the original examples with ones where the truth value of the embedded sentences is already settled in order to determine whether the puzzling behaviour of 'SPENDING GOOD' is connected to its non-factivity and/or non-counterfactuality.

For a clear case of factivity, we have to get rid of the conditional structure and replace *wenn* (if) with *dass* (that).[40] This would potentially complicate the analysis if it turned out that non-factivity of 'SPENDING GOOD' was at the core of its acceptability. However, the judgements concerning (83-b), the factive counterpart of 'SPENDING GOOD', are far from clear.

(83) a. SCENARIO: We had 10,000 euros in total to spend for a conference. We were free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest has always been the linguistic success of the conference (i.e. that there are good talks). We've already made a decision and spent all of the money on the buffet.

b. ?Es ist natürlich gut, dass wir 10.000 Euro für ein
it is of-course good that we 10,000 euros for a
Luxus-Buffet ausgegeben haben. Aber leider gibt es jetzt keine
luxury-buffet spent have but sadly gives it now no
Talks.
talks

[40] But see the upcoming subsection 3.2.2 for an example with *wenn* that is ambiguous between a real conditional and a factive meaning and that CAN be uttered in a factive scenario, then replaceable with the corresponding *dass*-sentence.

'It is of course good that we've spent 10,000 euros on a luxury buffet. But sadly there are no talks now.'

c. Es ist natürlich nicht gut, dass wir 10.000 Euro für ein
it is of-course not good that we 10,000 euros for a
Luxus-Buffet ausgegeben haben. Denn jetzt gibt es leider
luxury-buffet spent have because now gives it sadly
keine Talks.
no talks
'It is of course not good that we've spent 10,000 euros on a luxury buffet, because sadly there are no talks now.'

The new scenario in (83-a) differs from the original SCENARIO 'CONFERENCE' in that we have already made the decision of what to do with the money and spent all of it on the buffet. This decision is in stark contrast to our preferences that prioritize talks over food, but this is no problem for the plausibility of the scenario since acting against one's owns preferences is fairly common. We may be very bad in maths, we may simply have not thought so far, or maybe we've had a false belief like that speakers would give talks without refunds. Anyway, (83-b) or (83-c) is imagined to be uttered after this intuitively bad decision. (83-c) is uncontroversially and expectedly true in the given scenario, matching the intuition that this allocation of money was a bad idea.

If the same phenomenon as in the original example were to arise, we would expect (83-b) to be acceptable, too, and mysteriously compatible with (83-c) (just as 'SPENDING GOOD' is mysteriously compatible with 'SPENDING NOT GOOD'). Then we would have shown that neither *wenn* (if) nor the unsettledness of the truth value of the antecedent of 'SPENDING GOOD' is related to the source of the puzzle. If, however, the puzzle disappeared, one of these two factors would likely be responsible for the acceptability of 'SPENDING GOOD' or be a symptom of a third factor that influences both.

Unfortunately, the actual intuitions on (83-b) seem to support neither of these two conclusions. Judgements about the acceptability of (83-b) in scenario (83-a) vary a lot between German native speakers, and are often unclear. I.e. some people who accept 'SPENDING GOOD' also accept (83-b) and some don't, and some judge it less or marginally acceptable. This indicates that the unsettledness of the truth or falsity of the antecedent of 'SPENDING GOOD' is not directly related to the source of the puzzle, but this unsettledness might make something else - which is responsible for the acceptability of 'SPENDING GOOD' - easier available for many people.

A similar picture can be painted for a counterfactual version of 'SPENDING GOOD' and 'SPENDING NOT GOOD':

(84) a. SCENARIO: We had 10,000 euros in total to spend for a conference. We were free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest has always been the linguistic success of the conference (i.e. that there are good talks). We've already made a decision and spent most of the money on refunds and payments for speakers.

b. ?Es wäre natürlich gut gewesen, wenn wir 10.000 Euro für
it would of-course good been if we 10,000 euros for
ein Luxus-Buffet ausgegeben hätten. Aber dann gäbe
a luxury-buffet spent would-have but then would-give
es jetzt keine Talks.
it now no talks
'It would of course have been good if we had spent 10,000 euros on a luxury buffet, but then, sadly, there wouldn't be any talks.'

c. Es wäre natürlich nicht gut gewesen, wenn wir 10.000 Euro
it would of-course not good been if we 10,000 euros
für ein Luxus-Buffet ausgegeben hätten. Denn dann
for a luxury-buffet spent would-have because then
gäbe es jetzt keine Talks.
would-give it now no talks
'It would of course not have been good if we had spent 10,000 euros on a luxury buffet, because then, sadly, there wouldn't be any talks.'

In scenario (84-a), again, a decision on how to spend the money has already been made, only that this time we have spent most of the money on good speakers. This decision is very much in line with our preferences, so the actual world is now one where we've made a good decision. When uttering (84-b) or (84-c), we speculate about possible worlds where we decided differently, the actual world not being one of them. Again, the acceptability of (84-c) is naturally fitting our intuition (that deciding otherwise would have been a bad idea), while the acceptability of (84-b) remains unclear. Were non-counterfactuality directly related to the source of the puzzle in 'SPENDING GOOD', (84-b) should be totally out. Were there no relation between non-counterfactuality and the acceptability of 'SPENDING GOOD', (84-b) should be just as acceptable as 'SPENDING GOOD'. That the real picture seems to lie in between - as in the case of factivity - points towards an intermediate factor. A sound empirical investigation of the examples

presented in this subsection would be promising but is beyond the scope of this thesis.

3.2.2 The role of subjunctive

As mentioned above, subjunctive and counterfactuality seem to be relatively dissociated in German, which is why these two are dealt with separately here.[41] More specifically, in order to be acceptable in a counterfactual scenario (possibly amongst others), a conditional sentence must have a subjunctive verb form at least in the matrix sentence, whereas indicative - 'SPENDING GOOD', 'SPENDING NOT GOOD', (86-b) - and subjunctive - (84-b), (84-c), (86-d) - may vary in the embedded clause. On the other hand, conditionals with subjunctive in both parts, as (86-d), are accepted in non-counterfactual scenarios. [42] The present tense German conditionals without *good*-predication in (86) exemplify these possible uses (counterfactual, factive, unsettled; scenarios in (85)) of conditionals in dependency of their indicative/subjunctive-pattern:

(85) a. COUNTERFACTUAL SCENARIO: Tina is DJ'ing, Alex is sick.
b. FACTIVE SCENARIO: Alex is DJ'ing.
c. UNSETTLED SCENARIO: From time to time, Alex is DJ'ing at parties, but we don't know if that is the case today.

(86) a. Wenn Alex auflegt, läuft Eurotrash.
If Alex DJs-IND runs-IND eurotrash
'If Alex is DJ'ing, they're playing eurotrash.'
- **factive and unsettled scenario**

b. Wenn Alex auflegt, würde Eurotrash laufen.
If Alex DJs-IND would(SUBJ) eurotrash run-INF
'If Alex was DJ'ing, they'd be playing eurotrash.'
- **unsettled and counterfactual scenario**

c. *Wenn Alex auflegen würde, läuft Eurotrash.
If Alex DJ-INF would(SUBJ) runs-IND eurotrash

d. Wenn Alex auflegen würde, würde Eurotrash
If Alex DJ-INF would(SUBJ) would(SUBJ) eurotrash
laufen.
run-INF
'If Alex was DJ'ing, they'd be playing eurotrash.'
- **unsettled and counterfactual scenario**

wenn-conditionals with only indicative verb forms in the matrix as well as the

[41] This subsection has profited greatly from discussion with Sarah Zobel and Nina Haslinger.
[42] When the verb forms feature past tense as well as subjunctive, the picture may look differently, though.

embedded sentence, like (86-a), lack a counterfactual meaning but are typically ambiguous between a factive and a (non-factive, non-counterfactual) conditional with unsettled truth or falsity of the antecedent. So, if we want to find out whether the acceptability of 'SPENDING GOOD' is bound to the subjunctive verb form in the matrix sentence, we best use a version of it with only indicative, like (87-b), and rule out a factive reading as an intervening factor via the scenario, (87-a). ((87-b) and (87-c) are ambiguous, in a factive scenario they can be used like *Es ist gut, dass* ('It is good that')-sentences.)

(87) a. SCENARIO: A committee have 10,000 euros in total to spend for a conference. They are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Their primary interest is the linguistic success of the conference (i.e. that there are good talks). Cam has missed one meeting where the others talked about spending 10,000 euros on a luxury buffet. Cam is trying to convince the others to change their minds by saying:

b. Es ist natürlich gut, wenn ihr 10.000 Euro für ein
it is of-course good if you 10,000 euros for a
Luxus-Buffet ausgebt. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It is of course good if you spend 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es ist natürlich nicht gut, wenn ihr 10.000 Euro für ein
it is of-course not good if you 10,000 euros for a
Luxus-Buffet ausgebt. Denn dann gibt es leider keine Talks.
luxury-buffet spend because sadly gives it then no talks
'It is of course not good if you spend 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Interestingly (and contrary to the counterfactual and factive examples in section 3.2.1), there seems to be no difference at all - based on the interviews with German native speakers that I've conducted - between the acceptability of (87-b) and 'SPENDING GOOD' as long as both sentences are uttered in a scenario where it remains unclear what will actually happen with the money. This shows that subjunctive alone, dissociated from factivity and counterfactuality, is not related to the puzzle presented in this thesis.

This is relevant for the upcoming discussion insofar as Stalnaker (2014) claims that the German subjunctive ('Konjunktiv II') changes the common ground in such a way that a belief revision takes place and a part of the original common

ground is given up. More precisely, he claims that subjunctive shifts the the Ordering Source from the world of utterance to another possible world where some of the restrictions from the utterance situation don't hold. This would be an easy way out of the puzzle since the relevant sentence in 'SPENDING GOOD', repeated as (88-b), might then - via the subjunctive in the matrix sentence - receive a meaning along the lines of the paraphrase in (88-d) rather than the one in (88-c) (=(9)) that we've assumed so far and that doesn't suffice to explain the acceptability of 'SPENDING GOOD'.

(88) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. A possible world in which we do spend 10.000 euros on a luxury buffet and which is otherwise as close as possible to the world of utterance (we have only 10,000 euros in total; people don't give talks for free, ...) is higher than some reference group of possible worlds on a scale of success of the conference primarily in terms of talks.

d. A possible world in which we do spend 10,000 euros on a luxury buffet and which is only in some respects close to the world of utterance is higher than some reference group of possible worlds on some scale of preferences that we would have in this other world.

The fact that only changing subjunctive to indicative doesn't dissolve the puzzle doesn't exclude a shift along the lines of (88-d), but it shows that if such a shift happens, it is not triggered by or related to subjunctive. It would be syntactically unmotivated and invisible which might weaken such an account's position, depending on the alternative explanations. I will argue against an approach with a shifted Ordering Source in subsection 4.5.1.

3.2.3 Modifiers

It is striking that the original examples 'SPENDING GOOD' and 'SPENDING NOT GOOD' both contain the modifying adverb *natürlich* (of course / naturally / obviously) which usually stresses the incontestability of the modified proposition and weakens any possible alternative claim. This is seen in (89-b) as opposed to (89-a) without *natürlich*.

(89) a. Ich werde zu spät kommen. Aber vielleicht auch nicht, wenn
I will too late come but maybe also not if
ich jetzt ganz schnell bin.
I now very quick am
'I'm going to be late. But actually, maybe not, if I hurry a lot now.'

b. Ich werde **natürlich** zu spät kommen. ??Aber vielleicht auch
I will of-course too late come but maybe also
nicht, wenn ich jetzt ganz schnell bin.
not if I now very quick am
intended: 'I'm of course going to be late. But actually, maybe not, if I hurry a lot now.'

Both 'SPENDING GOOD' and 'SPENDING NOT GOOD' also work without *natürlich*:

(90) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre gut, wenn wir 10.000 Euro für ein Luxus-Buffet
it would-be good if we 10,000 euros for a luxury-buffet
ausgeben. Aber leider gibt es dann keine Talks.
spend but sadly gives it then no talks
'It would be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre nicht gut, wenn wir 10.000 Euro für ein
it would-be not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks
'It would not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

However, these sentences improve pragmatically when it is added. This might be because *natürlich* picks up on the imagined discourse before the utterance of the puzzling sentence and the salient option of buying a luxury buffet, so that the *Es wäre (nicht) gut*-judgement is perceived as less of an out-of-the-blue statement.

natürlich also seems to be used in the sense of 'admittedly'/'granted' in some cases, especially when it is followed by an *aber* (but)-sentence, as in (91).

(91) Natürlich ist sie fachlich am besten qualifiziert. Aber wir
natürlich is she professionally at-the best qualified but we
können uns ihr Gehalt nicht leisten.
can us her salary not afford
'Sure, she is the most qualified, but we can't afford her salary.'

It is tempting to argue, on the basis of this usage, that only one of 'SPENDING GOOD' and 'SPENDING NOT GOOD' contains *natürlich* in the strenghening sense (as in (89-b)) and the other *natürlich* in another, possibly even weakening sense. However, note that even in (91) *natürlich* strengthens the proposition it modifies (that the candidate is the most qualified one). What it weakens (via a contrast to the *aber*-sentence) is an implicit conclusion (let's hire her) that might be drawn rashly from the strengthened sentence. This suggests that there is only one meaning of *natürlich* in 'SPENDING GOOD', 'SPENDING NOT GOOD', (89-b) and (91), but there are different pragmatic reasons to strengthen a proposition - one might want to also strengthen an implicit conclusion (like that we should hire the candidate) or to build up the opponent's arguments before contesting them.

Accordingly, the pragmatic function of *natürlich* in 'SPENDING NOT GOOD' might be to stress how 'obviously not good' the idea of buying a luxury buffet is in the given context, trying to persuade others to therefore refrain from it. On the other hand, *natürlich* in 'SPENDING GOOD' seems to grant/admit that, yes, 'obviously it is good' to do so, BUT we have to consider other factors as well, so let's not buy the buffet. These different flavours of *natürlich* don't change the fact that the speaker of both 'SPENDING GOOD' and 'SPENDING NOT GOOD' is strongly committed to the goodness and not-goodness of spending 10.000 euros on a buffet, respectively, so the appearance of *natürlich* in both sentences reinforces the puzzle, if anything.

Other adverbs and particles frequently used in German good-predications in-

clude *eigentlich* (actually), *schon* [43], *in Summe* (in total), *insgesamt* (overall), *an sich* (per se) and *grundsätzlich* (in principle). Table 1 gives an overview of their acceptability in 'SPENDING GOOD' and/or 'SPENDING NOT GOOD':

	accepted in 'SPENDING GOOD'	accepted in 'SPENDING NOT GOOD'
natürlich	x	x
eigentlich	x	x
schon	x	?
in Summe		x
insgesamt		x
an sich	x	
grundsätzlich	x	

Table 1: Modifiers in *good*-predications

With exception of *in Summe* + *insgesamt* and *an sich* + *grundsätzlich*, all modifiers that are apt for a sentence can co-occur, as in (92-b) and (92-c). The two exceptions are presumably out because their semantics are too similar for the second modifier to contribute anything to the sentence meaning.

(92) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, pay-

[43] On the relevant reading, *schon* seems to emphasize verum focus. (Zimmermann (2018) analyzes modal *schon* as a degree operator comparing the alternatives p and ¬p.) I.e. (i) will be used if the truth of 'SPENDING GOOD' has already been contested or is already under debate in a given scenario. It is plausible that this is often the case in decision scenarios like SCENARIO 'CONFERENCE', which is why it isn't surprising that *schon* is common in *good*-predications.

(i) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich schon gut, wenn wir 10.000 Euro für ein
it would-be of-course SCHON good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It WOULD of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

(ii) on the other hand is a bit weird, possibly because focus on the falsity of the *good*-predication is easier to mark via focused *nicht* (not).

(ii) a. SCENARIO 'CONFERENCE'

b. ?Es wäre natürlich SCHON nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course SCHON not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine Talks.
luxury-buffet spend because then gives it sadly no talks
intended: 'It WOULD of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

ments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich eigentlich schon grundsätzlich gut,
it would-be of-course EIG SCHON in-principle good
wenn wir 10.000 Euro für ein Luxus-Buffet ausgeben. Aber
if we 10,000 euros for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
~ 'YES, it would, actually, of course be good in principle if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich eigentlich in Summe nicht gut, wenn wir
it would-be of-course EIG in sum not good if we
10.000 Euro für ein Luxus-Buffet ausgeben. Denn leider
10,000 euros for a luxury-buffet spend because sadly
gibt es dann keine Talks.
gives it then no talks
~ 'It would of course in reality not be good, everything considered, if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Apart from *natürlich* (of course), the other clear case of a modifier that may be used in both 'SPENDING GOOD' and 'SPENDING NOT GOOD' (and that also improves them both pragmatically) is *eigentlich*, meaning something like *in reality, actually* when stressed and functioning as a discourse particle when unstressed - both uses are possible in both of the discussed sentences. Eckardt (2009) argues that these two uses of adverbial *eigentlich* should be distinguished:

(93) a. Wie heißen Sie *eigentlich*?
how be-named you EIG
'what is your real name?'
Eckardt (2009), (9a)

b. Wie *heißen* Sie eigentlich?
how be-named you EIG
'what's your name, by the way?'
Eckardt (2009), (9b)

The unstressed one, (93-b), has a merely pragmatic function as an emotive marker adding a flavour of *thinking about it; well, actually; after some reflection* (Eckardt 2009). It is not surprising, therefore, that unstressed *eigentlich* pragmatically improves 'SPENDING GOOD' as well as 'SPENDING NOT GOOD': It is

considered adequate to the situation to think twice about what would be good.

The stressed adverbial *eigentlich*, as in (93-a), on the other hand, contributes to the sentence meaning in terms of truth conditions by creating a contrast between how things are on a nominal level and how they may seem phenomenologically (Eckardt 2009).

(94) a. SCENARIO 'CONFERENCE'

b. Es wäre EIGENTLICH gut, wenn wir 10.000 Euro für ein
It would-be actually good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It would ACTUALLY be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

'SPENDING GOOD' with stressed *eigentlich*, (94), - applying Eckardt (2009)'s analysis - means that the possible world under discussion (where we spend 10,000 euros on a buffet plus some other restrictions, Modal Base, subsection 2.1.1) nominally satisfies goodness (based on whichever scale, Ordering Source, subsection 2.1.2) while on a phenomenological level it looks like something else were the case. *eigentlich* under this reading may also appear before the verb together with *gut*, which shows that these form a constituent, because the verb is in second position in German. That way, a contrast is evoked between a 'real' and 'only apparent' sense of goodness: The world under discussion satisfies 'phenomenological goodness', but it doesn't satisfy 'actual, nominal goodness'.[44]

natürlich as well as stressed *eigentlich* are compatible with two different ways in which it might be the case that a certain world is good. I have been calling the first, 'standard' way in which a world can be good 'overall' goodness. 'Overall' goodness makes 'SPENDING NOT GOOD' true in the scenario 'CONFERENCE'. The second, 'partial' kind of goodness makes 'SPENDING GOOD' true in the same scenario:

(95) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

[44]The contribution of stressed *eigentlich* when added to 'SPENDING NOT GOOD' depends on the linear word order and the resulting scopal dependencies between the modifier and the negation, which goes beyond the scope of this thesis.

b. ‘SPENDING GOOD’:

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks

‘It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.’

c. ‘SPENDING NOT GOOD’:

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für ein
it would-be of-course not good if we 10,000 euros for a
Luxus-Buffet ausgeben. Denn dann gibt es leider keine
luxury-buffet spend because then gives it sadly no
Talks.
talks

‘It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.’

That *natürlich* and *eigentlich* may appear in both cases, ‘overall’ and ‘partial’ goodness, shows that these do not differ in how unquestionably / clearly / really / ‘at the root of it’ it is the case that the world is/isn’t good. This does not help decide between theories that postulate different Modal Bases and ones that assume different Ordering Sources for the two sentences of the puzzle (see preliminary discussion in section 1.3, see upcoming discussion in chapter 4). However, the behaviour of these modifiers makes it even clearer that the problem cannot be resolved by resorting to ethical undecidedness or vagueness. There are really exactly two different ways on which the assessment of the goodness of a possible world may be based.

These two ways may be informally characterized via the modifiers that may only appear in one of ‘SPENDING GOOD’ or ‘SPENDING NOT GOOD’:

(96) a. SCENARIO ‘CONFERENCE’

b. Es wäre (an sich / grundsätzlich / #in Summe /#insgesamt)
it would-be (MOD)
gut, wenn wir 10.000 Euro für ein Luxus-Buffet ausgeben.
good if we 10,000 euros for a luxury-buffet spend
Aber leider gibt es dann keine Talks.
but sadly gives it then no talks
‘It would be good (in principle / #everything considered) if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.’

c. Es wäre (#an sich / #grundsätzlich / in Summe / insgesamt)
it would-be (MOD)
nicht gut, wenn wir 10.000 Euro für ein Luxus-Buffet
not good if we 10,000 euros for a luxury-buffet
ausgeben. Denn dann gibt es leider keine Talks.
spend because then gives it sadly no talks
'It would not be good (#in principle / everything considered) if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Underlying 'SPENDING GOOD' is a meaning that is - of these four modifiers, only - compatible with *an sich* (per se) and *grundsätzlich* (in principle), while the distinctive meaning of 'SPENDING NOT GOOD' may be - of these four, only - emphasized via *in Summe* (in total) or *insgesamt* (overall). This points towards a solution to the puzzle that may be paraphrased by the contrast between being good 'in principle' ('partial goodness') versus being good 'everything considered' ('overall goodness').

3.2.4 Repeating context information

The factor that seems to influence the acceptability of a 'SPENDING GOOD'-type sentence most is how much of the information that is given in the scenario 'CONFERENCE' is repeated directly in the antecedent of the sentence in question. More specifically, a sentence that in a way 'contains the information that 10.000 is all money available' in the antecedent and which is otherwise like 'SPENDING GOOD' - (97-b) - is judged inacceptable or significantly less acceptable than 'SPENDING GOOD' for the clear majority of the interviewed German native speakers.

(97) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. ??Es wäre natürlich gut, wenn wir **das ganze Geld** /
it would-be of-course good if we the whole money /
alles von dem Budget für ein Luxus-Buffet ausgeben. Aber
all from the budget for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good if we spent all of the money/budget on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut, wenn wir **das ganze Geld** / it would-be of-course not good if we the whole money / **alles von dem Budget** für ein Luxus-Buffet ausgeben. Denn all from the budget for a luxury-buffet spend because dann gibt es leider keine Talks. then gives it sadly no talks
'It would of course not be good if we spent all of the money/budget on a luxury buffet, because unfortunately there are no talks then.'

The *nicht gut*-sentence (97-c) shows expected behaviour, whereas the *gut*-sentence (97-b) doesn't:

Assuming that *good*-predications, like all modal statements, are evaluated against all the information that is already part of the common ground before the utterance (i.e. all the context information given in SCENARIO 'CONFERENCE'), we expect it to make no difference whether a piece of information that is already given in the scenario is repeated in the utterance. In line with this, (97-c) is just as acceptable as was 'SPENDING NOT GOOD'.

What is puzzling, at first glance, is that (97-b) isn't accepted at all or at least not as clearly as 'SPENDING GOOD' by most people. It seems as though the original puzzle disappears along with this change. This is very much in line with one of the original informal paraphrases of 'SPENDING GOOD' which I presented in section 1.3, namely (15), repeated below as (98).

(98) If we ignore the fact that 10,000 euros is all the money we have and leave everything else as it is, then the world in which we spend 10,000 euros on a buffet is good.

Assuming for a moment that it is possible to ignore some information from the context selectively, it makes absolute sense that *das ganze Geld* (all of the money) / *alles von dem Budget* (all of the budget) [45] as a part of the evaluated statement would make such a difference: It may be possible to ignore a part of the context but impossible to ignore a part of the processed sentence in question. In section 4.6, I will connect this thought with Kratzer (1977, 1981, 1986, 1991, 2012b)'s Modal Base (see section 2.1) and follow up on the current line of argumentation.

[45] One person who didn't accept (97-b) with *alles von dem Budget* (all of the budget) did accept it with *das ganze Geld* (all (of) the money), possibly because of an also available 'all that money'-meaning of *das ganze Geld*. For all other people, this choice didn't influence the judgement. I thank Viola Schmitt and Nina Haslinger for pointing out this possible source of disturbance to me.

3.3 Misunderstandings and focus

We have seen now that subjunctive/indicative is not at all related to the puzzle (subsection 3.2.2), and factivity/counterfactuality might only be weakly/indirectly related to it (subsection 3.2.1). The modifiers that may be used in 'SPENDING GOOD' and 'SPENDING NOT GOOD' reinforce the puzzle and a real distinction between 'overall' and 'partial' goodness (subsection 3.2.3). The current section will deal with the pragmatic and information structural behaviour of the puzzle in a very sketchy way, and show that speakers of the two sentences need not be in disagreement about how to act.

If someone who uttered 'SPENDING GOOD' and someone who uttered 'SPENDING NOT GOOD' had an argument about the truth of these sentences, how would it most likely come about? In the world of utterance, everyone knows that there are only 10,000 euros to be spent, and everyone cares about the linguistic success of the conference. So in the case of a vote about what to actually do with the money, it is almost certain that both the speaker of 'SPENDING GOOD' and the speaker of 'SPENDING NOT GOOD' will vote against spending 10,000 euros on a luxury buffet - there is no clash of interests nor intentions. Assuming a minimum of rational behaviour, any argument about 'SPENDING GOOD' and 'SPENDING NOT GOOD' must be analytical by nature, i.e. it will be about the meaning of the phrases used (what is meant by the *good*-predication), rather than about opinions diverging in substance. (This fits well with the fact that 'SPENDING GOOD' and 'SPENDING NOT GOOD' may be uttered by one and the same person without them having a split personality or changing their mind.)

What seems to happen in case of such a disagreement is that the person who utters 'SPENDING GOOD' is attributing goodness to a world where the committee does something that this person would not actually suggest doing - spending 10,000 euros on a buffet -, and the person who utters 'SPENDING NOT GOOD' might be mistaken about that and think that the other person is attributing goodness to the world in question in order to suggest actually spending 10,000 euros on a buffet, as in (99-a). As an answer, the first person, A in the upcoming examples, might clarify, as in (99-b), (99-c) and (99-d), that they didn't mean to suggest doing so, nor to claim 'overall goodness'. Note the focus patterns (in small caps), in these possible clarifying answers:

(99) a. A: Es wäre gut, wenn wir 10.000 Euro für ein Buffet
A: it would-be good if we 10,000 euros for a buffet

ausgeben. B: Nein, wie kommst du denn auf sowas? Hast
spend B: no how come you DENN on such-what have
du schon vergessen, dass wir nur 10.000 Euro INSGESAMT
you already forgotten that we only 10,000 euros in-total
haben?
have
'A: It would be good if we spent 10,000 euros on a buffet. B: No, what makes you think such a thing? Have you forgotten that we only have 10,000 euros IN TOTAL?'

b. A1: Ja, ich weiß, ich will das eh nicht wirklich machen. Aber
A1: yes I know I want that EH not really do but
GUT wäre es schon trotzdem für die Konferenz, wenn
good would-be it SCHON nonetheless for the conference if
wir ein 10.000-Euro-Buffet kaufen.
we a 10,000-euro-buffet buy
'A1: Yes, I know. I don't really want to do that, no worries, but still, it WOULD be good for the conference, if we bought a 10,000 euro buffet.'

c. A2: Ja, ich weiß, ich will das eh nicht wirklich machen. Aber
A2: yes I know I want that EH not really do but
EIN 10.000-EURO-BUFFET ZU HABEN wäre gut.
a 10.000-euro-buffet to have would-be good.
'Yes, I know. I don't really want to do that, no worries, but HAVING A 10,000 EURO BUFFET would be good.'

d. A3: Ja, ich weiß, ich will das eh nicht wirklich machen. Aber
A3: yes I know I want that EH not really do but
AN SICH wäre es schon gut, wenn wir 10.000
on itself / per se would-be it SCHON good if we 10,000
Euro für ein Buffet ausgeben.
euros for a buffet spend
'Yes, I know. I don't really want to do that, no worries, but in principle it WOULD be good if we spent 10,000 euros on a buffet.'

In (99-b) (as a possible answer to B's objection in (99-a)), A first points out what they don't mean to say and then repeats a version of 'SPENDING GOOD', thereby claiming the compatibility of 'SPENDING GOOD' with rejection of the imperative 'Let's spend 10,000 euros on a luxury buffet!'. That compatibility is enough for B to drop the notion of *good*-predications they had in mind ('overall goodness') and identify the misunderstanding - assuming they have the other ('partial') meaning of *good*-predications available, but not as prominently as A. Additionally, there is stress on *gut* in (99-b), topicalizing it, and the focus particle *schon* (focusing the yes-value of the sentence) has been added. Thereby, while sharing the truth conditions with 'SPENDING GOOD', (99-b) shows a different

information structure, roughly paraphrased by (100):

(100) As for the GOODNESS of the possible world in question: YES, it IS good. (But as for the OVERALL DESIRABILITY / ADVISABLENESS: NO, it is NOT overall desirable / advisable.)

This information structure emphasizes the contrast between *good*-predication under the intended reading and what I have been calling 'overall goodness' for reasons of intuitiveness. If a speaker builds up goodness as an ALTERNATIVE to desirability/advisableness, it becomes clear that 'overall goodness' cannot be meant. If B just hasn't been thinking of the other, 'partial' notion, they will get that A has been using it. A more direct way to the solution of the missunderstanding in (99-a) is As uttering (99-c), repeated as (101):

(101) A2: Ja, ich weiß, ich will das eh nicht wirklich machen. Aber
A2: yes I know I want that EH not really do but
EIN 10.000-EURO-BUFFET ZU HABEN wäre gut.
a 10.000-euro-buffet to have would-be good.
'Yes, I know. I don't really want to do that, no worries, but HAVING A 10,000 EURO BUFFET would be good.'

Here, the embedded *wenn*-clause of 'SPENDING GOOD' has been exchanged with the infinitive verb phrase *ein 10.000-Euro-Buffet zu haben* (having / to have a 10,000 euro buffet) which is focused, the question under discussion being 'What is it that is good?', resulting in an information structure roughly paraphrasable as in (102):

(102) As for the question of what it is that is good: It is the consequence of having a 10,000 euro buffet. ((1) Not the consequence of not having any money left for talks. OR (2): Not the possible world under discussion as a whole.)

By choosing this way of clearing up B's confusion, A is in one way or the other downsizing the domain of what goodness is attributed to, possibly even from possible worlds to something smaller that might be designated by the infinitive clause. This connection to syntax is not a claim I'm ready to defend here, though. (Like individuated consequences of spending 10,000 euros on a buffet, or states of affairs / facts - whatever that means, see also section 4.4.) This may be interpreted as switching to B's notion of *good*-predications ('Ok, using your rules of what counts as good, namely only 'overall-goodness', what is good is not the possible world, but only the following aspect: ...' - possibility (2) in

(102)) or as clarifying which facts in the possible world make 'SPENDING GOOD' true according to A's own notion of *good*-predication ('Having a 10,000 euro buffet is generally a good thing for the success of the conference, and that is enough to satisfy my 'partial' notion of *good*-predications, even though, admittedly, there are overriding bad consequences, too.' - possibility (1) in (102)). Finally, A might respond to B's doubts in (99-a) by giving (99-d), repeated below as (103), as an answer:

(103) A3: Ja, ich weiß, ich will das eh nicht wirklich machen. Aber
A3: yes I know I want that EH not really do but
AN SICH wäre es schon gut, wenn wir 10.000 Euro
on itself / per se would-be it SCHON good if we 10,000 euros
für ein Buffet ausgeben.
for a buffet spend
'Yes, I know. I don't really want to do that, no worries, but in principle it WOULD be good if we spent 10,000 euros on a buffet.'

Of all the ways of clearing up the misunderstanding around 'SPENDING GOOD', this one is most directly related to the two different kinds of *good*-predications ('overall' vs. 'partial' for now). Here, topicalized *an sich* as well as focussed *schon* have been added to 'SPENDING GOOD', resulting in roughly the following information structure:

(104) As for the *an sich*-judgement of goodness: YES, it would be good if we spent 10,000 euros on a buffet. (But as for the overall-judgement: NO, it would not be good if we spent 10,000 euros on a buffet.)

We saw in subsection 3.2.3 that *an sich* may only be used in 'SPENDING GOOD'-type sentences, directly indicating 'partial'-*good*-predication:

(105) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre an sich(#insgesamt) gut, wenn wir 10.000 Euro
it would-be per se / in total good if we 10,000 euros
für ein Luxus-Buffet ausgeben. Aber leider gibt es dann keine
for a luxury-buffet spend but sadly gives it then no
Talks.
talks
'It would be good in principle if we spent 10,000 euros on a

luxury buffet. But unfortunately there are no talks then.'

c. Es wäre insgesamt (/#an sich) nicht gut, wenn wir 10.000
it would-be in total / per se not good if we 10,000
Euro für ein Luxus-Buffet ausgeben. Denn leider gibt es
euros for a luxury-buffet spend because sadly gives it
dann keine Talks.
then no talks
'It would not be good, everything considered, if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Conclusively, the modifier *insgesamt* (overall / everything considered) that may only be used for 'SPENDING NOT GOOD'-type sentences, indicating 'overall' *good*-predication, may be used (as in (106-d)) to clear a misunderstanding of the opposite kind compared to (99-a): (106-a) below, with alternative clarifications (106-b) and (106-c):

(106) a. A: Es wäre nicht gut, wenn wir 10.000 Euro für ein
A: it would-be not good if we 10,000 euros for a
Buffet ausgeben. B: Wie kannst du sowas sagen? Weißt
buffet spend B: how can you such-what say know
du, was da alles inkludiert ist? Cocktails, Tapas,
you what there all included is cocktails tapas
Molekularküche, ... Und wie die Leute in der Linguistik auf
molecular-kitchen ... and how the people in the linguistics on
sowas stehen?
such-what stand
'A: It would not be good if we spent 10,000 euros on a buffet. B: How can you say that? Do you have any idea what's included there? Cocktails, tapas, molecular kitchen, ... And how much people in linguistics are into that kind of stuff?'

b. A1: Ja, ich weiß, es wäre eh cool. Aber GUT ist es
A1: yes I know it would-be EH cool but good is it
trotzdem nicht für die Konferenz, wenn wir ein
still not for the conference if we a
10.000-Euro-Buffet kaufen.
10,000-euro-buffet buy
'Yes, I know. It WOULD be cool, sure, but still, it's not GOOD for the conference if we buy a 10,000 euro buffet.'

c. A2: Ja, ich weiß, es wäre eh cool. Aber
A2: yes I know it would-be EH cool but
KEINE TALKS ZU HABEN wäre nicht gut.
no talks to have would-be not good
'Yes, I know. It WOULD be cool, sure, but NOT HAVING ANY TALKS

would not be good.'

d. A3: Ja, ich weiß, es wäre eh cool. Aber INSGESAMT
A3: yes I know it would-be EH cool but in-total
wäre es nicht gut, wenn wir 10.000 Euro für ein Buffet
would-be it not good if we 10,000 euros for a buffet
ausgeben.
spend
'Yes, I know. It WOULD be cool, sure, but everything CONSIDERED, it would not be good, if we spent 10,000 euros on a buffet.'

Answer (106-d) resembles (99-d), directly addressing the intended 'overall' meaning by means of topicalization of a modifier that disambiguates (here: *insgesamt* (overall)), leading to an information structure as in (107):

(107) As for the *insgesamt*-judgement of goodness: NO, it would NOT be good if we spent 10,000 euros on a buffet. (But as for the 'partial'-judgement: YES, it WOULD be good if we spent 10,000 euros on a buffet.)

The reply in (106-b), on the other hand, insists on the 'overall'-usage of *good*-predication (as (99-b) did on the 'partial'-usage) after having admitted the advantages of a 10,000 euro buffet, indirectly clarifying that under A's intended meaning of the *good*-predication, that is not enough. And (106-c) specifies what it is that makes the world not good according to A's standards (as (99-c) did for the single aspect of goodness), namely not having any talks.

Topic and focus in (99-b), (99-d), (106-b) and (106-d) are within the matrix clause, setting the question under discussion roughly to some version of 'What is it that we mean when we attribute goodness here?'. This helps sharpen the intuitions of 'overall' versus 'partial'-*good*-predication.

In (99-c) and (106-c), on the other hand, the embedded (infinitive) sentence bears the focus. Lassiter (2011), his subsection 6.5.3, discusses the influence of focus WITHIN the embedded clause on the choice of comparison class of alternatives. Lassiter (2011) shows - crediting Villalta (2008) for the initial thought - that focus can affect the calculation of the threshold for modal expressions like *want* and *should* in such a way that the focus-bearing phrase is what is contrasted with alternatives. His example for *want* is as follows:

(108) a. Mother: I want you to go to the grocery store. (=6.50a, Lassiter (2011))

b. Son: I don't want to go to the grocery store. I want to go to a movie. (=6.50b, Lassiter (2011))

c. Mother: Well, I want you to go to a CLEAN movie, then. (=6.50c, Lassiter (2011))

The mother's utterance in (108-c) doesn't necessarily express a preference revision compared to (108-a), according to Lassiter (2011): Focus on 'clean' has the effect that only a subset of epistemically accessible worlds is considered - only those where the son goes to a movie -, and amongst those the ones where he goes to a clean movie are 'most wanted'. I.e. Focus introduces the alternatives in (109-a) for (108-c), while the standard alternatives that lead to the acceptance of (108-a) could be as in (109-b).

(109) a. ALT([(109-c)]) = {Son goes to an X movie | X ∈ {clean, violent, racy, ...}} (=6.53, Lassiter (2011))

b. ALT([(109-a)]) = {Son goes to X | X ∈ {grocery store, swimming pool, movie theater, ...}} (=6.52.b, Lassiter (2011))

good-predications Lassiter only discusses with embedded *that*- (not *if*-) sentences. [46] Lassiter (2011) claims that *good* allows focus within the embedded sentence to establish the comparison class, which is why (110) is accepted.

(110) It is good that you spilled WHITE wine on the carpet. (= 6.63 a, Lassiter (2011))

For Lassiter (2011), *good p* means something like 'significantly better than an alternative proposition', and the focus on *white* in (110) specifies that these alternatives are ones with differently coloured wine - i.e. the proposition 'that you spilled red wine on the carpet', compared to which 'that you spilled white wine on the carpet' is good, which explains why (110) is fine. Without this focus on *white*, the alternative proposition would have been 'that you didn't spill white wine on the carpet', rendering (110) without focus unacceptable in scenarios where clean carpets are desired. I pursue an account of *good* being attributed to worlds, not propositions, see section 4.4, but what Lassiter (2011) claims about focus and alternative propositions may easily be transferred to a comparison class of possible worlds, e.g. Sode (2019)'s neutral worlds.

As for (110), this would mean that Sode (2019) could theoretically offer a solution that lets focus on *white* rearrange the goodness-scale in such a way that

[46] Possibly because they fit his characterisation of the object of *good*-predication as a proposition, see section 4.4, better.

red wine spilling worlds are lower on the scale of goodness (i.e. bad) and white wine spilling worlds are higher (i.e. good) than the neutral range (e.g. rosé wine spilling worlds).

As for the focus within infinitive clauses in (99-c) and (106-c), this suggests that - opposed to the other examples in this section - the misunderstanding is not solved by addressing the question of which notion of goodness is used, but by (possibly even buying into the opponent's notion and) changing the standards of neutral worlds and consequently of goodness: In (99-c), the 'bad' comparison worlds might be such that we don't don't have a 10,000 buffet, period. (Whatever that binarity means for the now empty neutral interval.) In (106-c), the 'bad' worlds might be such that there ARE talks. This idea has to remain sketchy here, is has only been to show that in principle, Sode (2019) could deal with Lassiter (2011)'s / Villalta (2008)'s focus data, and that (99-c) and (106-c) are a different kind of solution to the misunderstanding discussed in this section.

We have seen that misunderstandings between a speaker of 'SPENDING GOOD' and 'SPENDING NOT GOOD' are never about what action to take but often about which notion of goodness - 'overall' or 'partial' - has been used. Someone who attributes 'overall' goodness to a world is strongly committed to the action that leads to this world (here: the action of not spending 10,000 euros on a buffet), while attributing 'not overall' goodness doesn't come with any such commitment (here: to spending 10,000 euros on a buffet). Thus, a speaker can, by excluding this commitment, make clear that they have been using 'partial' goodness. And by admitting the advantages ('awesomeness') of a luxury buffet but insisting that doing so is not good, one may make clear that 'overall' goodness is what is in question. The two notions of goodness may also be distinguished by a stressed *insgesamt* (in total) or *an sich* (per se), respectively. A different way of settling the problem is to change the focus pattern WITHIN the embedded clause, resulting in a change of the neutral interval on the goodness scale. Arguably, this option is not of explanatory nature as the others but includes a change of commitment.

Returning to the puzzle, we have seen in this chapter that it is a new puzzle but might be related to conflicting wishes (section 3.1); it is not tied to subjunctive, and only loosely to factivity/counterfactuality, but modifiers reinforce the description in terms of 'overall' versus 'partial' goodness, and repeating the fact that 10,000 euros is all of the money in the antecedent makes the puzzle disappear (section 3.2). Finally, we saw that also pragmatic and information

structural properties of misunderstandings around the puzzle support a notion of 'overall' versus 'partial' goodness (section 3.3).

4 Discussion of possible approaches

In the preceding chapters, I have presented the puzzle of the acceptability of 'SPENDING GOOD' in SCENARIO 'CONFERENCE' (or else the compatibility of 'SPENDING GOOD' with 'SPENDING NOT GOOD' in the same scenario), explained why a standard Kratzer (1977, 1981, 1986, 1991, 2012b) and Sode (2019) style approach doesn't do the trick without modifications (i.e. why it is a puzzle to begin with), and why it differs from other modal puzzles with obvious contextual updates or uncertainties. Importantly, I took a closer look to the empirical behaviour of the puzzle in chapter 3. For the upcoming discussion, we have to bear the following characteristics of the puzzle in mind: Subjunctive/indicative patterns don't influence the puzzle, as long as they don't come with factivity or counterfactuality. When these are involved, i.e. when the truth of the antecedent property isn't unsettled, the judgements get blurry, pointing towards another factor that weakly relates subjunctive and my puzzle. The modifiers *natürlich* (of course) and *eigentlich* can appear in both 'SPENDING GOOD' and 'SPENDING NOT GOOD' and reinforce the puzzle by strengthening the claim of goodness AND not-goodness. The modifiers *an sich* (per se) and *insgesamt* (in total) differentiate between the two cases. For most German native speakers, repeating the information that 10,000 euros is all of the money in the antecedent dissolves the puzzle. A suitable account must predict as many of these observations as possible, but at the very least not directly contradict any of them.

I will now go through some possible solutions to the puzzle that build on the rough paraphrases of 'SPENDING GOOD' in chapter 1, repeated below:

(111)
a. The world in which we spend 10,000 euros on a buffet (and that is otherwise like the world of utterance) is not 'literally' good, but good in the 'funky' kind of sense. **section 4.3**
b. If we only consider culinary aspects (contrary to our actual preferences), then the world in which we spend 10,000 euros on a buffet (and everything else is like in the world of utterance) is good. **subsections 4.5.1, 4.5.2**
c. If we ignore the fact that 10,000 euros is all the money we have and leave everything else as it is, then the world in which we spend 10,000 euros on a buffet is good. **subsections 4.6.1, 4.6.2**

d. There is some good aspect about / part of the world where we spend 10,000 euros on a buffet. **section 4.1**
e. The world where we spend 10,000 euros on a buffet is better than a world where we don't do anything with the money. **section 4.2**
f. The proposition 'that we spend 10,000 euros on a buffet' has - in the possible world where we do so - the attribute of being good. **section 4.4**

I will argue that the paraphrase in (111-c) is closest to the actual solution to the puzzle, i.e. I will argue for a Modal Base based account to the puzzle. The most important argument for this will build on the observation in subsection 3.2.4 that repeated context information cannot be disregarded.

4.1 Some good aspect

Let's go back to the core of the question of why 'SPENDING GOOD' may be judged true even though the overall outcome of spending 10,000 euros on a buffet is clearly a negative one in SCENARIO 'CONFERENCE'. One of the first thoughts might be that in this case, goodness is not attributed to possible worlds as a whole but to an aspect or part of them. The initial paraphrase that corresponds with this idea is (16-a), repeated below as (112).

(112) There is some good aspect about / part of the world where we spend 10,000 euros on a buffet.

This seems to match the vague intuition that someone who utters 'SPENDING GOOD' is not committed to finding the world where we spend all of the money on a buffet good in a sense that considers every fact of this world. It would be enough, with a paraphrase like (112) for 'SPENDING GOOD', e.g. that the food is yummy in the possible world under discussion for 'SPENDING GOOD' to come out true, as it does.

However, there are several problems with this potential account: First, 'aspect' and 'part' are notoriously vague terms, leaving a lot open to interpretation. It is not at all clear what they might denote semantically. 'aspect' has a flavour of 'in this respect' and might therefore be interpreted as indicating different priorities, i.e. Ordering Sources, while 'part' might point in the direction of different Modal Bases, and/or situation semantics, if situations can be partitioned and are taken to be 'parts' of possible worlds in an intuitive sense.[47]

[47] Versions of situation semantics that are conservative extensions of possible worlds seman-

Additionally, an account along the lines of (112) is clearly too permissive: There is SOME good aspect about most any possible world (actually, all but the very worst one(s)). For example, a world where we burn the 10,000 euros and accordingly have neither food nor talks at our conference is still one where we are in a position to potentially organize conferences which means that we are personally quite privileged and that there is academic life in this world's society - two of many good aspects. Still, (113) is clearly unacceptable in SCENARIO 'CONFERENCE':

(113) #Es wäre natürlich gut, wenn wir 10.000 Euro verbrennen.
it would-be of-course good if we 10,000 euros burn
'It would of course be good if we burned 10,000 euros.'

The existential formulation in (112) being out, one might try to specify the kind of good aspect that goodness is attributed to:

(114) About the possible world where we spend 10,000 euros on a buffet, the aspect that people really enjoy the buffet is good.

Then, however, is remains unclear why this specific aspect should be allowed attributing goodness to while the aspect that there is scientific life is not enough for (113) to be accepted. Depending on how such an account is spelled out, there are of course ways of explaining the difference via restrictions on which aspects/parts are accessible. In order to do so, a proponent of the intuition in (112) will have to specify what they mean by 'aspect' or 'part' and resort to one of the upcoming accounts. For example, Arregui (2010) might model what we have been calling 'aspect' as a salient situation. This is also one way of modelling what I will argue for in the end, see section 5.2. Without specifications, however, an account based on salient situations only shifts the problem to which situations are salient and which aren't. In the following sections, we'll get closer to predictability of why e.g. 'SPENDING GOOD' is accepted but (113) isn't.

4.2 Better than doing nothing

Another one of the intuitive paraphrases for 'SPENDING GOOD' that has been mentioned in section 1.3 is (16-b), repeated below as (115).

tics are termed 'possibilistic'; they construe propositions as sets of world parts, rather than complete possible worlds, Kratzer (2021). A version of these is used in Kratzer's own work as well as Elbourne (2005). For one of the earliest works on situations, see Barwise & Perry (1983).

(115) The world where we spend 10,000 euros on a buffet is better than a world where we don't do anything with the money.

What comes to mind first is that: Well, this is too permissive again, because many things you can do with 10,000 euros (including buying tons of collectible Magic: The Gathering cards) are better than doing nothing with the money, but still we would not accept (116) in SCENARIO 'CONFERENCE'.

(116) #Es wäre natürlich gut, wenn wir 10.000 Euro für Unmengen
it would-be of-course good if we 10,000 euros for tons
Magic-Sammelkarten ausgeben.
magic-collect-cards spend
'It would of course be good if we spent 10,000 euros on tons of collectible Magic cards.'

This line of argumentation can easily be rejected, however, by pointing to the Ordering Source that can be assumed for 'SPENDING GOOD': The scenario makes it clear that only the success of the conference is relevant, and while a buffet is certainly not the most important aspect of a the success of a conference, it does contribute to it at least a little, possibly even when there are no talks, assuming that a fake conference without talks but with socializing and enjoying a great buffet together is in some way a not maximally unsuccessful conference (see subsection 2.1.2 and the ordering in (38)). Collectible cards, on the contrary, arguably don't contribute to the success of a conference AT ALL, so with respect to the success of the conference, buying collectible cards is not even better than doing nothing with the money. This potentially explains under a better-than-nothing-account why 'SPENDING GOOD' is true but (116) is false. The reference worlds that the one under discussion is contrasted with (e.g. Sode (2019)'s neutral worlds) might be ones where nothing happens with the money, resulting in rather low standards of goodness, so that even a fake conference with only a buffet satisfies them.

To rule out this possible explanation of the acceptability of 'SPENDING GOOD', let's diversify the ordering scale of the original example a bit by enriching the scenario with the additional fact that almost all linguists are vegetarians, (118-a), so that we can assume the following preference ordering:

(117) OS(w)= most money spent on talks > all money spent on a vegetarian buffet > all money spent on a meat-heavy buffet > money not spent at all

(118) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. **As is well known, almost all linguists are vegetarians.** Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
(vegetarisches) Buffet ausgeben.
vegetarian buffet spend
'It would of course be good if we spent 10,000 euros on a (vegetarian) buffet.'

c. ??Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
fleischlastiges Buffet ausgeben.
meat-heavy buffet spend
'It would of course be good if we spent 10,000 euros on a meat-heavy buffet.'

d. Es wäre natürlich better als gar nichts mit dem
it would-be of-course better than nothing at all with the
Geld zu machen, wenn wir 10.000 Euro für ein
money to do if we 10,000 euros for a
fleischlastiges Buffet ausgeben.
meat-heavy buffet spend
'It would of course be better than doing nothing with the money if we spent 10,000 euros on a meat-heavy buffet.'

In this scenario, where most linguists are vegetarians, (118-b) can still be uttered with and without the additional restriction on the buffet that it is vegetarian - even though neither spending all the money on a meat-heavy buffet nor spending all the money on a vegetarian buffet seems to be a good idea in the overall sense. This is another instance of 'partial'-*good*-predication as in 'SPENDING GOOD'. (118-c), on the other hand, is hardly acceptable in (118-a), even though - assuming the ordering in (117) - having a meat-heavy buffet is better than nothing for the success of the conference, since the few non-vegetarian linguists can enjoy the buffet, and the vegetarians may find themselves some side dishes at least. This intuitive preference is confirmed by the acceptability of (118-d) in (118-a). Accepting (118-d) is perfectly compatible with rejecting (118-c), which is why a better-than-nothing-meaning is out for (118-c), and it would be highly unmotivated to still assume it for the analogous (118-b) or the original 'SPENDING GOOD'.

For an additional argument against a better-than-nothing-account, remember from section 3.3 that Lassiter (2011) claims that *good* allows focus within the embedded sentence to establish the comparison class. For Lassiter (2011), this is a comparison class of propositions, but it might well be modified in the spirit of Sode (2019) as a comparison class of neutral possible worlds. I.e. focus has the power to change which worlds count as neutral and consequently which worlds are high enough on the scale to count as good. For Lassiter (2011)'s example (120), the intuitive preference ordering in (119) can be assumed, which would have to be spelled out differently for propositions and worlds, respectively:

(119) OS(w)= no wine spilled > white wine spilled > red wine spilled

(120) It is good [compared to red-wine-spilling-worlds] that you spilled WHITE wine on the carpet. (= 6.63 a, Lassiter (2011), modified)

(121) It is good [compared to no-wine-spilling-worlds] that you spilled wine on the carpet. (= 6.63 b, Lassiter (2011), modified)

(122) It is good [compared to no-wine-spilling-worlds] that you spilled white wine on the carpet.

Due to the different standards of neutral worlds set by focus, many worlds that are similar to the actual world will be such that (120) is true while (121) and (122) are not. This focus behaviour of *good*-predications allows us to actually express, (123-a), (123-b), and/or to exclude, (125-a), a better-than-nothing-meaning:

(123) a. Es ist natürlich gut, wenn wir die 10.000 Euro zumindest
it is of-course good if we the 10,000 euros at-least
ÜBERHAUPT/IRGENDWIE ausgeben.
at-all/somehow spend
'It is of course good if we at least spend the 10,000 euros SOMEhow.'

b. Es ist natürlich gut, wenn wir die 10.000 Euro zumindest
it is of-course good if we the 10,000 euros at-least
AUSGEBEN (bevor wir sie verfallen lassen).
spend before we them decay let
'It is of course good if we at least SPEND the 10,000 euros (rather than letting them go to waste).'

As we see, there ARE ways of expressing the better-than-nothing-meaning that has been discussed as a candidate for the meaning of 'SPENDING GOOD' in this

section, e.g. (123-a) and (123-b), but they all require a special focus that makes this alternative the salient one: In (123-a), the focus on *überhaupt* (at all) or *irgendwie* (some-/anyhow) evokes a contrast with 'not at all'/'not in any way'; in (123-b), the focus on *ausgeben* (spend) creates a contrast to 'don't spend', 'leave on the bank account', 'let it go to waste' or the like. (The latter is made explicit in brackets in (123-b) and improves the sentence pragmatically.) Focus seems to be both available and necessary to receive a better-than-nothing-contrast, so it is unclear why and how the same should happen in 'SPENDING GOOD' without any special focus pattern.

Note that in (123-a) and (123-b), the definite article *die* is close to mandatory, i.e. the indefinite version that would be closer to 'SPENDING GOOD' and 'SPENDING NOT GOOD' is only marginally if at all possible in the given scenario, because the question under discussion is 'what to do with the 10,000 euros'. We saw in subsection 3.2.4 that repetition of the fact that 10,000 euros is all of the money (here implied by the definite article) leads to lower acceptability of 'partial'-*good*-predication. Considering that it leads to higher acceptability in this case: Could it be that we are dealing with an instance of 'overall'-*good*-predication here? It seems so, since both (123-a) and (123-b) are perfectly fine with the modifier *in Summe* (in sum), indicating an 'overall' evaluation of goodness (see subsection 3.2.3):

(124) a. Es ist natürlich in Summe gut, wenn wir die 10.000 Euro
it is of-course good in sum if we the 10,000 euros
zumindest ÜBERHAUPT/IRGENDWIE ausgeben.
at-least at-all/somehow spend
'It is of course good, considering everything, if we at least spend the 10,000 euros SOMEhow.'

b. Es ist natürlich in Summe gut, wenn wir die 10.000 Euro
it is of-course in sum good if we the 10,000 euros
zumindest AUSGEBEN (bevor wir sie verfallen lassen).
at-least spend before we them decay let
'It is of course good, considering everything, if we at least SPEND the 10,000 euros (rather than letting them go to waste).'

So, the discussed focus patterns inside the if-sentence lead to a better-than-nothing-meaning via a non-standard selection of alternatives, but changing the relevant contrast alone is enough now (also) for 'overall' goodness. This seems to be an entirely different phenomenon from the 'partial' goodness that we see in 'SPENDING GOOD'. This is confirmed by the observation that the 'partial' meaning remains available even when focus evokes a contrast that excludes the possibil-

ity of doing nothing with the money:

(125) a. Es ist natürlich gut, wenn wir 10.000 Euro für ein BUFFET
it is of-course good if we 10,000 euros for a buffet
ausgeben.
spend
'It is of course good if we spend 10,000 euros on a BUFFET.'

Here, the focus on *buffet* sets the question under discussion to 'what to spend the money on' (excluding the possibility of not spending it at all) and leads to alternatives such as *speakers*, *alcohol* or *Magic the Gathering cards*. Even amongst only those possibilities, it is considered good in a 'partial' sense, it seems, to spend the money on a buffet.

Summing up, we have seen that the threshold for 'partial'-goodness in scenario (118-a) with mostly vegetarian linguists seems to lie somewhere between 'spending all the money on a vegetarian buffet' (which satisfies goodness) and 'spending all the money on a meat-heavy buffet' (which doesn't) - and not just 'above' doing nothing. At the same time, neither of the alternatives discussed in this section satisfies 'overall'-goodness since the only 'overall' good thing is still spending most of the money on speakers - except for when this possibility is excluded from consideration by focus as in (123-a) and (123-b).

At this point, one might argue: Well, ok, so it is not enough even for 'partial'-goodness to be better than doing nothing in this scenario. But the basic line of argumentation stays the same: The threshold of which worlds are 'high enough' on the scale to count as good is just lower in the 'partial' examples, and this might be modelled via a different choice of neutral worlds, see section 2.2, Sode (2019). My answer to that is: Yes, but this is just another way of putting the original observation in section 1.2, namely that sometimes it can be enough to satisfy (the lower standards of) 'partial'-goodness, and this can be compatible with not satisfying 'overall'-goodness in the very same context. It doesn't have any new explanatory force, since it doesn't help explain why both of the two ranges of neutral worlds may be accessed by the same person in the same context, nor is it at this point distinguishable from an account that leaves the range of neutral worlds constant between 'overall' and 'partial' goodness and that assumes the difference to concern the worlds that go into this assessment, i.e. the Modal Base, see section 4.6 for discussion.

4.3 Ambiguous *good*

In section 1.3, I mentioned another possible source of the compatibility of 'SPENDING GOOD' and 'SPENDING NOT GOOD', namely lexical ambiguity of *good*. One of the few of my consultants who didn't accept 'SPENDING GOOD' mentioned that with *geil* (awesome/wicked) or *cool* (cool) they would have accepted it. What if there are two lexical entries for *gut* (good) in German and this person doesn't have the 'awesome'-entry available for 'SPENDING GOOD' but most others do? This would explain this consultant's rejection of 'SPENDING GOOD' and at the same time offer an explanation for the compatibility of 'SPENDING GOOD' and 'SPENDING NOT GOOD' for most other people. The two lexical meanings of *gut* would have to be, on the one hand, something close to *fun, awesome, wicked, cool* - i.e. an expression of hedonistic pleasure with a lot of expressive force - and, on the other hand, the classical moral or teleological meaning of *good*. The first would appear in sentences with 'partial'-*good*-predications like 'SPENDING GOOD' and the second one in 'overall'-*good*-predications such as 'SPENDING NOT GOOD'. This idea of a meaning for 'SPENDING GOOD' can be paraphrased by (13), repeated below as (126).

(126) The world in which we spend 10,000 euros on a buffet (and that is otherwise like the world of utterance) is not 'literally' good, but good 'in the *funky* kind of sense'.

It is plausible that we may find something awesome that we don't find teleologically/morally good and vice versa. This approach has the potential of making the sentences 'SPENDING GOOD' and 'SPENDING NOT GOOD' compatible even though they look like each other's negation on the surface - since underlyingly they are are not, analogous to the following example:

(127) a. I like banks [shores].
b. I don't like banks [finance institutes].

First, note that the ambiguity approach to *gut* predicts that the phenomenon captured by the puzzle concerning 'SPENDING GOOD' and 'SPENDING NOT GOOD' is not typologically broad: True lexical ambiguity is considered a historical coincidence, so the two meanings of *gut* should have the same surface string only in German and maybe some related languages. I don't make a typological claim in this thesis, but see subsection 5.3.1 for some thoughts and hints on the crosslinguistic status of the puzzle.

Even without settling this question, however, the ambiguity approach must be

rejected: If *gut* had these two lexical meanings, it should appear at least wherever the one meaning's supposed synonyms *geil* or *cool* do. That is not the case:

(128) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich #gut/geil/cool, wenn wir die
it would-be of-course good/wicked/cool if we the
Geldfrage vergessen und eine Hippiekommune gründen.
money-question forget and a hippie-commune found
Aber leider gibt es dann keine Talks.
but sadly gives it then no talks
'It would of course be good if we forgot about the question concerning money and founded a hippie commune. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut/?geil/?cool, wenn wir die
it would-be of-course not good/wicked/cool if we the
Geldfrage vergessen und eine Hippiekommune gründen.
money-question forget and a hippie-commune found
Denn dann gibt es leider keine Talks.
because then gives it sadly no talks
'It would of course not be good if we forgot about the question concerning money and founded a hippie commune, because unfortunately there are no talks then.'

In (128-b), founding a hippie commune is assessed in terms of goodness, *geil*-ness or coolness in the same scenario as in the original puzzle. While it is perfectly fine to judge forgetting about the money and founding a hippie commune *geil* or *cool*, it is not accepted to predicate goodness to it by using *gut*. On the other hand, when we are evaluating 'overall'-goodness as in (128-c), it is possible but a bit pragmatically weird to find founding a hippie commune not *geil* and not *cool*, but doing so is clearly not good, which is why (128-c) works fine with *gut*.

An additional argument against an ambiguity based approach to the puzzle can be drawn from ellipsis:[48]

(129) a. SCENARIO: We have 10,000 euros in total to spend for a confer-

[48] I owe this argument to an idea by Viola Schmitt.

ence. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks). **All linguists like having whiteboards available to write on, even in informal contexts. Unfortunately, the whiteboards are in the cellar and the conference is going to take place on the 5th floor. There is no elevator.**

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxusbuffet ausgeben und wenn wir die Whiteboards aus
luxury-buffet spend and if we the whiteboards out-of
dem Keller in den fünften Stock tragen.
the cellar into the fifth floor carry
It would of course be good if we spent 10,000 euros on a luxury buffet and if we carried the whiteboards from the cellar to the fifth floor.

Here, the *good*-predication is embedding a conjunction of two instead of one if-clause. Additionally to the original antecedent about spending the money on a buffet, goodness is now also predicated to carrying the whiteboards to the fifth floor. Carrying whiteboards is neutral with regard to the question of whether there will be talks at the conference, but it contributes a bit to the success of the conference, so it is expected that this action alone would be judged good both in the 'overall' and in the 'partial' sense in the given scenario. But it is definitely not fun or awesome to carry them, which is why we can be sure that the *gut* in the matrix sentence must be a teleological one. However, there is only one instance of *gut* in the matrix sentence which has to embed both if-clauses. We see that spending 10,000 euros on a buffet is in (129-b) and 'SPENDING GOOD' judged good in a 'literal' teleological sense, and the ambiguity approach is on the wrong track.

Before turning to the next candidate, let me make a remark on sarcasm/irony as a potential explanation of the acceptability of 'SPENDING GOOD':[49] It is not entirely clear to me how this idea is related to the ambiguity approach presented and rejected here: One might argue that a particular use of 'sarcastic *good*' brings with it the same expressive force as *geil* (awesome) or *cool* - then 'sarcastic *good*' is just another way of putting the idea that has been discussed here, in which case the argument from ellipsis above applies. Or one might argue that sarcasm applies to the whole sentence at the pragmatic level after semantic inter-

[49] I thank Nina Haslinger for pointing out that I should comment on this.

pretation, turning the meaning around to the opposite plus some attitude towards it. I am not following the recent discussion on the interaction of semantics and pragmatics regarding sarcasm, but it is common knowledge that sarcasm comes with other signs signalling an unserious attitude. Now, these don't have to be present when we utter 'SPENDING GOOD'. We might imagine a serious situation, tone, mood and attitude and try and add something like *Hmmmm, well* to make it clearer that we are seriously thinking of a solution to our money distribution problem, and 'SPENDING GOOD' still works. If we imagine a sarcastic tone added to it, on the other hand, anything goes, e.g. (128-b) becomes acceptable with *gut*, as do many other examples that are said to be out in the following sections. Therefore, I consider sarcasm an entirely different phenomenon and exclude it from consideration from now on.

4.4 Propositions

The potential solution to the puzzle that is discussed in this section differs most radically from all others discussed in the thesis in that it challenges a basic assumption that I have been making from the start: That in *good*-predications *good* is a predicate of possible worlds and that we can, consequently, use Kratzer (1977, 1981, 1986, 1991, 2012b) style modal semantics for conditionals for them. This is a standard assumption (made in Sode (2019), amongst others) but has been challenged in the recent literature by Lassiter (2017) (but see also Lewis (1973)) who treats the embedded clause in *good*-predications semantically and syntactically as propositional arguments of *good*. Sode (2019), whose notion of *good* I have been using (see section 2.2), rejects Lassiter (2017)'s account on the basis of syntactic and semantic arguments some of which will be sketched below. I wont attempt to settle this ongoing debate that touches principled questions of modality at the syntax-semantics-interface but I will briefly discuss the aspects that are relevant for my puzzle. First, however, let me point out why a Lassiter (2017) style approach might be considered helpful for a solution to my puzzle in the first place. In section 1.3, one of the informal possible paraphrases for 'SPENDING GOOD' I gave was (16-c), repeated here as (130).

(130) The proposition 'that we spend 10,000 euros on a buffet' has - in the possible world where we do so - the attribute of being good.

This paraphrase leaves the question totally open how a proposition having an attribute is to be understood and modelled. One direction to go is Lassiter (2017), which will be sketched below (but see also Lewis (1973)). (130) is basically a more specific version of the intuition that only one aspect/fact is judged good

in 'SPENDING GOOD', as discussed in section 4.1 more generally. Compared to the discussion there, (130) is less vague and could be linked to a concrete syntactic claim in the sense of Lassiter (2017): If propositions correspond to something we call facts in everyday life, then the intuition that 'well, 'SPENDING GOOD' only means that the fact that we have a great buffet is good' might easily be captured by treating *good* as a predicate of propositions as Lassiter (2017) does.

But there are a series of problems with that: First of all, a Lassiter (2017) style account to the puzzle is in danger of being over-permissive. I.e., an account along the lines of (130) cannot explain the rejection of (116) nor of (128-b) with *gut* (good): Why are the propositions 'that we spend 10,000 euros on Magic: The gathering cards' and 'that we forget about the money and found a hippie commune' not good, but 'that we spend 10,000 euros on a buffet' is? Note, however, that this problem is not specific to a propositions based account. All accounts discussed here are in danger of being overly permissive, in one way or the other (compare the discussion in the previous sections 4.1, 4.2 and 4.3 as well as the upcoming sections 4.5 and 4.6).

Importantly, however, Lassiter (2017)'s treatment of *good*-predications is NOT meant to separate facts from their consequences, as we might think we need it for 'SPENDING GOOD' to come out true. (We might want to separate the fact that we have a buffet from the consequence of this, that we don't have talks.) On the contrary: Propositions are closely tied to the 'complete' worlds in which they are true for Lassiter (2017). The reason why he uses propositions and not worlds directly to undergo the *good*-ordering has nothing to do with an untangling of these two but is of more technical nature: Worlds are classically ordered on an ordinal scale, but to account for the empirical behaviour of *good* we need an interval or cardinal scale. I don't comment on this, see Lassiter (2017) and Sode (2019) for a discussion. What I want to show in this section is that Lassiter (2017)'s version of a proposition based account to *good*-predications doesn't do better in explaining my puzzle than a Sode (2019) and Kratzer (1977, 1981, 1986, 1991, 2012b) style account using possible worlds more directly - which is not to say that it is doing worse.

To grasp Lassiter (2017)'s basic idea, first assume a value function V that assigns each world an exact value on a scale of goodness, i.e. it determines how good this world is. Let me apply this idea to a model with some possible worlds that relate to my puzzle, assuming a value scale from 1 to 100 with somewhat arbitrary numbers within the intuitive ordering in (131) from subsection 2.1.2,

(38), for the sentences from my puzzle:

(131) g(w*) = good talks + good food > good talks + no/bad food > no/bad talks + good food > no/bad talks + no/bad food

(132)
a. w_1: We have a great buffet and great talks. $V(w_1)$=99
b. w_2: We have an average buffet and great talks. $V(w_2)$=90
c. w_3: We have a great buffet and no talks. $V(w_3)$=4
d. w_4: We have an average buffet and no talks. $V(w_4)$=2

Lassiter (2017)'s scale of goodness of propositions is a lifted scale of the goodness of worlds in terms of the value $V(w)$ such that a proposition's goodness or badness follows from the goodness of the possible outcome worlds (where the proposition is true) weighted in a specific way by their probabilities prop. Let's assume the following alternative background story for my puzzle and the probabilities of outcomes that follow from it:

(133) SCENARIO CAPRICE CONFERENCE: We have 10.000 euros to spend for a conference, but we may not spend any of it for speakers. Whether there will be great speakers or none at all depends entirely on the mood of a despotic rector who is benevolent on every second day on average.

(134)
a. q: We spend 10.000 euros on a luxury buffet. ⟶ prob(w_1)=0.5; prob(w_3)=0.5; prob(w_2)=0; prob(w_4)=0
b. ¬q: We don't spend 10.000 euros on a luxury buffet. ⟶ prob(w_1)=0; prob(w_3)=0; prob(w_2)=0.5; prob(w_4)=0.5

The expected value of a PROPOSITION is the result of applying another function (135) ('expected value' $\mathbb{E}_V$) to the proposition φ that gives us a weighted average (weighted by probability) of the actual values of (our best guess of - relative to a domain D) the worlds where φ is true:

(135)

$$\mathbb{E}_V(\varphi) = \sum_{w \in \varphi \cap D} V(w) \times \text{prob}(\{w\} \mid \varphi \cap D).$$

Lassiter (2017), p. 187

A proposition is good, for Lassiter (2017), if the resulting value is relevantly high on the given scale of goodness. This is in line with common cases of decision theory, i.e. the propositions that come out as good for Lassiter (2017) are the ones that a rational subject should try to 'make true', given their epis-

temic limitations. For the alternative scenario 'caprice conference', (133), and the propositions q and ¬q, (134), the expected values are as follows, so q turns out better than ¬q, as desired:

(136) a. $\mathbb{E}_V(q) = 0.5 \text{ x } V(w_1) + 0.5 \text{ x } V(w_3) + 0 \text{ x } V(w_2) + 0 \text{ x } V(w_4) = 0.5 \text{ x } 99 + 0.5 \text{ x } 4 = 51.5$

b. $\mathbb{E}_V(\neg q) = 0.5 \text{ x } V(w_2) + 0.5 \text{ x } V(w_4) + 0 \text{ x } V(w_1) + 0 \text{ x } V(w_3) = 46$

In the case of my original puzzle, however, I attempted to make the consequences of spending 10,000 euros absolutely clear (we don't have talks), and even if you argue that you never have 100 percent security, SCENARIO 'CONFERENCE' and the truth of 'SPENDING NOT GOOD' show that of all the worlds where it is true that we spend 10,000 euros on a buffet, the ones where we don't have talks are by far the most probable ones and would have to be weighted accordingly under a Lassiter (2017) style account, i.e. the value of these worlds - where we have no talks - would be the ones that are multiplied with, say, 0.99 for the outcome of the weighted average. And since the value of this world without talks is very low (by stipulation for w_3 above: 4 out of 100), the value of the proposition 'that we spend 10,000 euros on a luxury buffet' will also be very low (for the stipulated numbers above: 4.95) and the proposition should be judged not good, as it is in 'SPENDING NOT GOOD'.

In order for Lassiter (2017)'s account to predict the acceptability of 'SPENDING GOOD', one would have to assume either (i) that a world without talks has a high value - which is not in line with the OS - or (ii) that the decision makers' best guess of how worlds where 'that we spend 10,000 euros on a luxury buffet' is true look is that there are still talks - which is in conflict with the salient information that 10,000 euros is all of the money. And even if these modifications were made: Will the resulting account still be able to deal with the acceptability of 'SPENDING NOT GOOD'? There is exactly one value the weighted average function assigns a given property, after all. For my puzzle, it seems, two different values for one and the same proposition would be needed, while the information known to the decision makers stays constant. The basic problem for a Lassiter (2017) style approach to my puzzle, it seems then, is not that he uses propositions instead of worlds - this doesn't seem to change anything relevant for the puzzle - but rather the kind of scale that is used.

The original idea that a propositions based account might be helpful for the

puzzle was that it might make it easier to 'single out' one fact that we attribute goodness to. But there are so many cases, like 'SPENDING NOT GOOD', where that's exactly what we don't want, i.e. it must still be possible to express 'overall goodness' that considers all the consequences. A mechanism that offers both options without any visible differences between 'SPENDING GOOD' and 'SPENDING NOT GOOD' except for the negation seems a very hard thing to implement into a Lassiter (2017) style approach, since in a way this account is meant to achieve the opposite and help to explain (the linguistic side of) only overall good decisions in the sense of decision theory. We saw in section 3.3, however, that people who utter 'SPENDING GOOD' are not even committed to acting on it and actually spending 10,000 euros on a buffet.

Another weakness of an account to the puzzle based on propositions is that the embedded clauses in the puzzle are *wenn*(if)-clauses, not *dass*(that)-clauses. The informal paraphrase (130) that we would like to use, on the other hand, contains a proposition with *that*. But if we exchange *wenn* (if) for *dass* (that) in 'SPENDING GOOD', we also have to change subjunctive to indicative in the matrix sentence and arrive at a factive statement where it is said to be good about the actual world that we do spend the money on a 10,000 euro buffet. As discussed in subsection 3.2.1, this makes the judgements on the puzzle less clear. Why would that be if propositions - that should be even clearer expressible via a *that*-clause than an *if*-clause - are at the core of the puzzle?

Also, it remains totally unclear under a propositions based account how we arrive at propositions from an *if*-clause. The contribution of *wenn* (if) would have to be something other than in a conditional. It couldn't even just be null, because we have to account for the non-factive reading of 'SPENDING GOOD'. This is expressed in the informal paraphrase (130) above by the insertion 'in the possible world where we do so'. After all, the proposition 'that we spend 10,000 euros on a buffet' cannot be attributed goodness in a world where it is not true. Sode (2019) criticizes Lassiter (2017)[50] for his disregarding of *good*-predications with *if*-clauses as opposed to ones with *that*-clauses that fit Lassiter (2017)'s own system more neatly. By neglecting the contribution of *if*, Lassiter (2017) ignores striking parallels between *good*-predications with *if*-clauses and plain conditionals, like that they share the rules of use in dependence of indicative, sub-

[50]Sode (2019) also gives valid arguments concerning factivity patterns and NEG-raising against Lassiter (2017). On the other hand, he admits that Lassiter (2017) has a point when it comes to the types of scales that are needed, and argues that this points towards a broader problem that must be dealt with independently. I focus on arguments that are of relevance for my puzzle.

junctive and counterfactual mood (see Sode (2019) for details of this critique, see Kratzer (1979) for the rules of use).[51]

To sum up, a Lassiter (2017) style proposition based approach to the puzzle does nothing for a solution of the puzzle since Lassiter (2017) DOES consider the consequences of the most probable outcomes which isn't in line with our initial idea that propositions might 'single out facts'. If we found a way to do so in order to get 'SPENDING GOOD' right, we might lose the ability to predict the acceptability of 'SPENDING NOT GOOD' on the way. Also, proposition based accounts don't consider the many parallels between *good*-predications and ordinary conditionals (see Sode (2019)). Note that having built up Sode (2019) against Lassiter (2017) in this section hasn't done anything to modify a Kratzer (1977, 1981, 1986, 1991, 2012b) and Sode (2019) based account (see chapter 2) in such a way that it can deal with the problem. It just shows that giving up on the basic assumption that *good* is a predicate of worlds doesn't help.

[51] Sode (2019) makes the concession that this parallel ends when it comes to the location of the Ordering Source in the case of subjunctive mood: He argues that in (i) the assessment of goodness, i.e. the Ordering Source, must stem from the world of utterance, because a shifted interpretation of *good* would suggest that the speaker doesn't care in the actual world.

(i) It would be good if Mary would recover again. (=Sode (2019)'s 22a)

Remember (section 2.2) that Sode (2019) repeats the common assumption (Stalnaker (2014), a.o.) that for conditionals, subjunctive shifts the Ordering Source from the utterance world to the world where the antecedent is true. Under this assumption, that *good*-predications receive an unshifted interpretation even with subjunctive distinguishes them from ordinary conditionals. Sode (2019)'s own notion of *good* deals with this problem in that the shift cannot happen because of an oncoming type mismatch (section 2.2).
Especially for German, however, it is not at all clear that this shift happens in ordinary conditionals with subjunctive. E.g. (54-a) and (54-b) (repeated below) are perfectly fine (both with ordinary subjunctive and *würde* (would)-subjunctive), which is not compatible with a shifted interpretation since bats / people thinking like bats arguably don't find their being a / thinking like a bat interesting:

(ii) a. Lisa fände es interessant, wenn sie eine Fledermaus wäre.
Lisa find-SUBJ it interesting if she a bat was
Lisa would find it interesting if she were a bat.
b. Lisa würde es interessant finden, wenn sie wie eine Fledermaus denken würde.
Lisa would it interesting find if she like a bat think would
Lisa would find it interesting if she thought like a bat.

This is not an argument against Sode (2019), it just lowers the relevance of his particular treatment of *good*. On the other hand, it strengthens his point that Lassiter (2017) neglects all kinds of parallels between ordinary conditionals and *good*-predications.

4.5 Different Ordering Sources

4.5.1 Shifted Ordering Source

We have seen that all ideas of how to explain the acceptability of both 'SPENDING GOOD' and 'SPENDING NOT GOOD' discussed so far fail. They have proven too vague to make predictions or incompatible with German intuitions (as far as these can be generalized). So far, however, none of them has gone to the core of modality, the concepts of Ordering Source and Modal Base (see section 2.1), i.e. the two most promising kinds of approaches have not jet been touched on. In this subsection, I will discuss the general idea that an unexpected Ordering Source is responsible for the acceptability of 'SPENDING GOOD', and in the following subsection 4.5.2, I will present a more restricted variation of this account. After having rejected both versions, I will turn to the Modal Base as the source of the puzzle in subsections 4.6.1 and 4.6.2.

The initial intuition that may lead to assuming two distinct Ordering Sources for 'SPENDING GOOD' and 'SPENDING NOT GOOD' has been sketched in section 1.3 and paraphrased in (14), repeated as (137):

(137) If we only consider culinary aspects (contrary to our actual preferences), then the world in which we spend 10,000 euros on a buffet (and everything else is like in the world of utterance) is good.

The idea here is to challenge the assumption that 'SPENDING GOOD' and 'SPENDING NOT GOOD' use the same scale of goodness - that in uttering 'SPENDING GOOD' and in uttering 'SPENDING NOT GOOD' we have the same priorities in mind relative to which the worlds are attributed goodness (namely success of the conference primarily in terms of talks). As seen in subsection 2.1.2, this scale can be modelled as the Ordering Source for the modal expressions in 'SPENDING GOOD' and 'SPENDING NOT GOOD', following Kratzer (1977, 1981, 1986, 1991, 2012b).

If we found a way to explain how in 'SPENDING GOOD' the preferences mentioned in the scenario are ignored or somehow don't make it to the processing of 'SPENDING GOOD', this would shed light upon the puzzle: Somehow, the person who utters 'SPENDING GOOD' doesn't relate to their actual preferences in the world of utterance (i.e. the preferences given in the scenario), but to another scale of goodness, e.g. the culinary success of the conference. We can expect a luxury buffet to increase goodness relative to this particular scale (it leads to better food on the conference, people enjoy the buffet a lot), and the fact that as a consequence there are no talks at the (then fake) conference would not matter at all

(again, relative to the new scale).

One way of modelling these different Ordering Sources for 'SPENDING GOOD' and 'SPENDING NOT GOOD' would be to assume a shift of the Ordering Source from the world of utterance to another, e.g. the possible world that is the result of processing the antecedent - i.e. the possible world where we DO spend 10,000 euros on a luxury buffet. To grasp the concept of this possible shift, compare the two occurrences of a different kind of modal statement in (138-a) and (138-b):

(138) a. Susi would love to have a cat. (She keeps complaining about her partner's allergy. But once she had one I know she would hate it.)

b. Susi would love to have a cat. (She keeps saying she is a dog person, but once she saw the little kitty I know she would melt away.)

(138-a) means something like that the world where Susi has a cat is high on the scale of Susi's ACTUAL preferences in the world of utterance, i.e. she NOW holds the wish to have a cat. (138-b) on the other hand - due to a shifted Ordering Source - means that the cat world is high on a scale of Susi's preferences IN THE CAT WORLD, i.e., the speaker of (138-b) suspects that Susi's preferences in the world where she has a cat would - other than in the actual world of (138-b) (w_u) - be such that she loves having a cat. Assuming our puzzle works analogously would lead to roughly the meaning in (139) for 'SPENDING GOOD' (instead of (140) which I have been assuming):

(139) In the possible world where we spend 10,000 euros on a luxury buffet (w_b), this very same possible world will be high on the scale of goodness that we will have in this world.

(140) w_b is high on the scale of goodness from the actual world (the world of the utterance of 'SPENDING GOOD': w_u.

This would explain the acceptability of 'SPENDING GOOD' in SCENARIO 'CONFERENCE', e.g. if w_b and w_u were as follows:

(141) a. **true in $\mathbf{w}_u$**: we want to organize a linguistically successful conference; we only have 10,000 euros in total; speakers don't give talks without refunds; ... $\longrightarrow$ **Ordering Source g($\mathbf{w}_u$)**: good talks + good food > good talks + no/bad food > no/bad talks + good food > no/bad talks + no/bad food (=(38))

b. **true in w_b**: we only have 10,000 euros in total; speakers don't give talks without refunds; ...; we spend 10,000 euros on a luxury buffet; we have changed our priorities and prioritize food over talks ⟶ **Ordering Source h(w_b)**: good talks + good food > no/bad talks + good food > good talks + no/bad food > no/bad talks + no/bad food

If (139) was the correct paraphrase of 'SPENDING GOOD', the person who utters it wouldn't by doing so claim that the resulting world is good relative to this person's actual preferences (as given in the scenario), but rather that if we acted against our actual preferences and spent all of the money on the buffet, then we wouldn't regret having done so, since our preferences would have changed, i.e. we would be happy with the status quo once we taste the food. While this is undoubtedly much more plausible than assuming 'overall goodness' relative to utterance world standards for 'SPENDING GOOD', it is not what we say when we utter 'SPENDING GOOD', i.e. 'SPENDING GOOD' IS evaluated against the standards of the world of utterance), as the acceptability of (43-b) and (43-c), repeated below, shows:

(142) a. SCENARIO 'CONFERENCE'

b. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10.000 euros for a
Luxus-Buffet ausgeben, aber wenn das Buffet dann wirklich
luxury-buffet spend but when the buffet then really
da ist, wissen wir es sicher wieder nicht zu schätzen.
there is know we it surely again not to value
'It would of course be good if we spent 10.000 euros on a luxury buffet, but by the time the buffet really was there, we surely wouldn't value it appropriately, again.'

c. Es wäre natürlich nicht gut, wenn wir 10.000 Euro für
it would-be of-course not good if we 10.000 euros for
ein Luxus-Buffet ausgeben, obwohl wir es sicher für gut
a luxury-buffet spend though we it surely for good
halten würden, wenn das Buffet dann da ist.
hold would when the buffet then there is
'It would of course not be good if we spent 10.000 euros on a luxury buffet, even though by the time the buffet really was there, we surely would find it good.'

Remember from subsection 3.2.2 that Stalnaker (2014) relates such a shift of the Ordering Source for modal structures to subjunctive. We saw there, however, that it does not influence the occurrence of the puzzle in German whether

the matrix sentences have subjunctive or indicative verb forms - as long as the truth of the antecedent remains unsettled. This does not rule out the possibility of a shifted Ordering Source in 'SPENDING GOOD', but it does detach the assumed shift from syntax, i.e. there would have to be no visible traces of it, leading to the question of when such a shift is NOT possible (since puzzles like the one discussed here don't appear with all modal statements). This will lead to the question of permissiveness, as discussed below.

But first, before turning to the consequences of assuming two instead of one Ordering Source, for the puzzling sentences, remember why we want to assume a single Ordering source from the beginning:

The relevant sentences in 'SPENDING GOOD' and 'SPENDING NOT GOOD' are uttered in the very same SCENARIO 'CONFERENCE', and this scenario gives detailed information about the preferences of all relevant people. It says that our primary interest is the linguistic success of the conference (i.e. that there are good talks). Now, this doesn't leave a lot to the imagination, it basically directly gives us the ordering discussed in subsection 2.1.2 as (38), repeated as (143):

(143) OS(w)= good talks + good food > good talks + no/bad food > no/bad talks + good food > no/bad talks + no/bad food

If it weren't for this precision, it would be less problematic to assume two different Ordering Sources, as in the following example:

(144) a. scenario: Alex$_i$ makes every party more fun, everyone likes them$_i$. They$_i$ have some symptoms of the Coronavirus.
b. It's good if Alex$_i$ comes to the party [thinking about how the party can be the most fun]. Well, actually, it's NOT good if they$_i$ come to the party [now considering the health of the other party guests].

Note that even in this example (without any information on preferences given in the scenario), the change of Ordering Source has to be indicated by *well, actually*, and it is hard to distinguish it from a belief revision, i.e. a change concerning the Modal Base, remembering the fact that Alex has the Coronavirus between the two statements. Even here, it is unlikely that many people would judge it good if Alex comes to the party, out of the blue, since we usually fill in preferences from the actual world when the scenario doesn't predefine them. This is a methodological weakness of any account with distinct Ordering

Sources for 'SPENDING GOOD' and 'SPENDING NOT GOOD': It should only be accepted if there is no explanation for the puzzle with lower cost than giving up on the standard assumption that a very precise preference ordering that is given in the scenario for the world of utterance is used as the Ordering Source in any sentence directly following it.

Ordering Source based accounts to the puzzle face the problem that once this restriction is given up, it remains unclear where the Ordering Sources for modal statements may come from, i.e. there is a danger of these accounts becoming vague and overly permissive. (We will, however, see in subsection 4.6.1 that Modal Base based accounts face a parallel problem, so - since other accounts are out - we will have to face the problem of restriction eventually.) To illustrate this problem, consider again (128-b) (=(145-b), slight changes) - which already served as an argument against ambiguous *gut* in section 4.3 - in contrast to 'SPENDING GOOD':

(145) a. SCENARIO 'CONFERENCE'

b. #Es wäre natürlich gut, wenn wir die Geldfrage
it would-be of-course good if we the money-question
vergessen und eine Hippiekommune gründen. Aber leider gibt
forget and a hippie-commune found but sadly gives
es dann keine Talks.
it then no talks
'It would of course be good if we forgot about the question concerning money and founded a hippie commune. But unfortunately there are no talks then.'

If 'SPENDING GOOD' really had - without any visible indications - a different Ordering Source than 'SPENDING NOT GOOD' and than is given in the scenario for the world of utterance, we expect this to be possible in many other cases including (145-b). Take the possible modelling of this different Ordering Source by means of a shift in the sense of (139): It is not at all clear why it should be the case that our preferences would change to prioritizing food over talks once we act against our present preferences but on the other hand it is not the case that our preferences change to prioritizing pot and free love once we experience it. This does not rule out an Ordering Source based account entirely, it just means that any such account must be more precise than what has been discussed here, in order to restrict the possibilities of available Ordering Sources (possibly but not necessarily in the form of a shift). In the upcoming subsection 4.5.1, I will discuss one such attempt of restriction.

Finally, and most importantly (since this is different for Modal Base based accounts, as we'll see in subsections 4.6.1 and 4.6.2), Ordering Source based accounts don't explain the data discussed in subsection 3.2.4, i.e. that repeating in the *Es ist gut* (It is good)-sentence the information that 10,000 euros is all of the money - via *das ganze Geld / alles von dem Budget* (all of the money/budget) - results in lower acceptability of sentences with 'partial' *good*-predication, see (97-b). Furthermore, some people who didn't accept the 'partial' *ganz*-sentence (97-b) mentioned spontaneously that they would need an additional *könnte* (could) for it to be acceptable, so (146) is judged good by everyone who the topic came up with.

(146) Es wäre natürlich gut, wenn wir **das ganze Geld** /
it would-be of-course good if we the whole money /
alles von dem Budget für ein Luxus-Buffet ausgeben **könnten**.
all from the budget for a luxury-buffet spend could
Aber leider gibt es dann keine Talks.
but sadly gives it then no talks
'It would of course be good if we could spent all of the money/budget on a luxury buffet. But unfortunately there are no talks then.'

It might well be possible to model (151-c) via a shift to a possible world where it is the case that it is possible - reasonably, without acting against one's preferences possible - to spend all of the money on a luxury buffet; e.g. because another institution pays the speakers. If so, this would be additional evidence that (I) these kind of shifts need overt material like *könnte(n)* (could) in (146), and (II) they render also sentences like (151-c) (with all relevant context information repeated) acceptable, so this is likely a distinct phenomenon from 'partial' goodness.

4.5.2 Covertly specified Ordering Source

In the preceding subsection, we saw that Ordering Source based accounts to the puzzle of the compatibility of 'SPENDING GOOD' and 'SPENDING NOT GOOD' (i) face a problem of restriction - they have to answer the question of why a hippie Ordering Source as in (145-b) is out, but the assumed foodie Ordering Source that leads us to consider only culinary aspects when judging the acceptability of 'SPENDING GOOD' should be available - and (ii) these accounts don't explain the data from subsection 3.2.4, that repetition of the information that we only have 10,000 euros in total makes the puzzle disappear. I comment on both of these points in the present subsection: I try to give a specific restriction on

the kinds of Ordering Sources that are and aren't available which consequently does or does not lead to acceptability of 'SPENDING GOOD'-type 'partial' *good*-predications. Then, I will challenge this new Ordering Source account (that will be more specified than the one in the previous subsection 4.5.1) in the light of the data from subsection 3.2.4.

The general idea for a plausible restriction on Ordering Sources is that those that have SOMETHING to do with the goals given in the context are available, and all others are not. Think of the contrast between the hippie and the foodie Ordering Source, as discussed in subsection 4.5.1: Finding it good to forget about the money and found a hippie commune (as intended by (145-b)) requires an Ordering Source that differs fundamentally from the preferences given in the scenario. We would have to forget about the success of the conference as our goal entirely. Spending 10,000 euros on a buffet (as in the original 'SPENDING GOOD'), on the other hand, doesn't require us to forget about the success of the conference as our goal. It just calls for a revision of the ordering WITHIN the broader goal of the success of the conference, i.e. instead of overall success we have to focus on culinary success. While these are clearly distinct preference orderings and culinary success is surely not the most relevant contributing factor to overall success of the conference, it DOES contribute to it - as opposed to founding a hippie commune. 'Culinary success of the conference' may even be described as a more specified version of 'success of the conference'. What if in interpreting 'SPENDING GOOD' we somehow 'add' this specification? Such a mechanism - if available in principle - could apply to 'SPENDING GOOD' but not (145-b), since specification of the Ordering Source is not enough to receive a hippie Ordering Source from the given scenario.

Before I elaborate on this idea, consider the general possibility of spelling out the relevant Ordering Source within the matrix sentence of a *good*-predication (additionally to the information in the scenario):

(147) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz, wenn wir 10.000 Euro für
for the success the-GEN conference if we 10,000 euros for

ein Luxus-Buffet ausgeben. Aber leider gibt es dann keine
a luxury-buffet spend but sadly gives it then no
Talks.
talks
'It would of course be good for the success of the conference if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut
it would-be of-course not good
für den Erfolg der Konferenz, wenn wir 10.000 Euro für
for the success the-GEN conference if we 10,000 euros for
ein Luxus-Buffet ausgeben. Denn dann gibt es leider keine
a luxury-buffet spend because then gives it sadly no
Talks.
talks
'It would of course not be good for the success of the conference if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

d. #Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz, wenn wir das Geld
for the success the-GEN conference if we the money
vergessen und eine Hippiekommune gründen. Aber leider gibt
forget and a hippie-commune found but sadly gives
es dann keine Talks.
it then no talks
'It would of course be good for the success of the conference if we forgot about the money and founded a hippie commune. But unfortunately there are no talks then.'

e. Es wäre natürlich nicht gut
it would-be of-course not good
für den Erfolg der Konferenz, wenn wir das Geld
for the success the-GEN conference if we the money
vergessen und eine Hippiekommune gründen. Denn dann
forget and a hippie-commune found because then
gibt es leider keine Talks.
gives it sadly no talks
'It would of course not be good for the success of the conference if we forgot about the money and founded a hippie commune, because unfortunately there are no talks then.'

In (147-b-e), the assumed Ordering Source is overtly encoded in the embedding clause, via *für den Erfolg der Konferenz* (for the success of the conference), and importantly, this does not change the judgements on 'SPENDING GOOD' nor

the hippie example: (147-b) is just as acceptable as is the version without overt Ordering Source, 'SPENDING GOOD', and (147-d) is as bad as (145-b) - Could it be that (145-b) is bad BECAUSE (147-d) is bad, i.e. because *für den Erfolg der Konferenz* (for the success of the conference) has always been the only Ordering Source available and founding a hippie commune just doesn't have anything to do with it? The remaining question, then, is: Why are 'SPENDING GOOD' and (147-b) accepted when they seem to share the Ordering Source *für den Erfolg der Konferenz* (for the success of the conference) and it is intuitively not good for the overall success for the conference to spend 10,000 euros on a buffet? To answer this question, let's have a look at the following example with even more overt material in the matrix sentence:

(148) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz in kulinarischer Hinsicht,
for the success the-GEN conference in culinary respect
wenn wir 10.000 Euro für ein Luxus-Buffet ausgeben. Aber
if we 10,000 euros for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good for the success of the conference culinarily if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut
it would-be of-course not good
für den Erfolg der Konferenz insgesamt, wenn wir 10.000
for the success the-GEN conference overall if we 10,000
Euro für ein Luxus-Buffet ausgeben. Denn dann gibt es
euros for a luxury-buffet spend because then gives it
leider keine Talks.
sadly no talks
'It would of course not be good for the overall success of the conference if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

In the *good*-predications in (148), more specific Ordering Sources than in (147) appear, and the judgements stay the same: (148-b) corresponds to (147-b) and

'SPENDING GOOD' in that they are all instances of 'partial' *good*-predication where goodness is predicated to a world where we spend 10,000 euros on a buffet (in the same scenario where this is all of the money). The only difference between these sentences is the overt Ordering Source material in the matrix sentence: no overt Ordering Source in 'SPENDING GOOD', *für den Erfolg der Konferenz* (for the success of the conference) in (147-b), and *für den Erfolg der Konferenz in kulinarischer Hinsicht* (for the culinary success of the conference) in (148-b). And, importantly, the three sentences share that they are acceptable in the same scenario even though the world where the antecedent is true (we do spend 10,000 euros on a buffet) is not good for the conference in the 'overall' sense.

This is surprising in the case of 'SPENDING GOOD' as well as (147-b), but not in the case of (148-b): Since the Ordering Source in the matrix sentence makes it clear that we only consider culinary success, it makes sense that the preferences given in the scenario are overridden, and on the new preference scale of culinary success, the world goodness is attributed to is high (because the buffet leads to great culinary success). That way, we seem to get rid of the need to distinguish between 'overall' and 'partial' goodness in the case of (148-b): It is 'overall' good for the culinary success of the conference to spend 10,000 euros on a buffet. At the same time, it is 'overall' not good for the overall / primarily scientific success of the conference to do so, which is why (148-c) is fine, too, and why (148-b) and (148-c) are compatible. This (explaining the compatibility of the two sentences plus getting rid of having to paraphrase our intuitions with two notions of goodness, 'overall' and 'partial') is exactly what we would want for a solution of the original puzzle concerning 'SPENDING GOOD' and 'SPENDING NOT GOOD'.

What comes up naturally as a solution of the original puzzle is to assume that 'SPENDING GOOD', (147-b) and (148-b) are underlyingly the same. They might share a meaning that is made most explicit by (148-b) with the full specified Ordering Source *für den Erfolg der Konferenz in kulinarischer Hinsicht* (for the culinary success of the conference), while in (147-b) a part of this Ordering Source would be covert, and in 'SPENDING GOOD' all of it. This would mean that 'SPENDING GOOD' uses the more specified Ordering Source of (148-b) - overriding some of the context preferences -, only that it is not visible in 'SPENDING GOOD'. 'SPENDING NOT GOOD' on the other hand, uses the Ordering Source from (147-c) - *für den Erfolg der Konferenz insgesamt* (for the overall success of the conference) - which is the same as the preference ordering given in the scenario. This has the potential of solving the puzzle (we get rid of the notions of

'overall' and 'partial' goodness while explaining the compatibility of 'SPENDING GOOD' and 'SPENDING NOT GOOD') while at the same time restricting the Ordering Sources that are available for *good*-predications: The hippie Ordering Source is not available because there is no version of (149) (that we obtain by inserting something for '???') that is clearly true, i.e. there is no aspect of the conference that would profit from founding a hippie commune.

(149) ??Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz in ??? Hinsicht, wenn wir das
for the success the-GEN conference in ??? respect if we the
Geld vergessen und eine Hippiekommune gründen. Aber leider
money forget and a hippie-commune found but sadly
gibt es dann keine Talks.
gives it then no talks
'It would of course be good for the success of the conference with respect to ??? if we forgot about the money and founded a hippie commune. But unfortunately there are no talks then.'

Before adopting this account of Ordering Sources with different grades of specificity, however, we have to check it against the data from subsection 3.2.4, that repeating that 10,000 euros is all of the money in the embedded sentence dissolves the puzzle, i.e. 'SPENDING GOOD' plus this information is judged unacceptable or less acceptable by most German speakers. Not only is there no obvious way in which the account presented in this section could explain the data, but combining overtly specified Ordering Sources and repeated context information leads to the surprising effect that now all German speakers accept this version of 'SPENDING GOOD', (150-b):

(150) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz in kulinarischer Hinsicht,
for the success the-GEN conference in culinary respect
wenn wir **das ganze Geld** für ein Luxus-Buffet ausgeben.
if we the whole money for a luxury-buffet spend
Aber leider gibt es dann keine Talks.
but sadly gives it then no talks

'It would of course be good for the success of the conference culinarily if we spent all of the money on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut
it would-be of-course not good
für den Erfolg der Konferenz insgesamt, wenn wir
for the success the-GEN conference overall if we
das ganze Geld für ein Luxus-Buffet ausgeben. Denn dann
the whole money for a luxury-buffet spend because then
gibt es leider keine Talks.
gives it sadly no talks
'It would of course not be good for the overall success of the conference if we spent all of the money on a luxury buffet, because unfortunately there are no talks then.'

The acceptability of (150-c) as well as 'SPENDING NOT GOOD', (97-b) (147-c) and (148-c) is expected under (all accounts discussed in this thesis but also) an account to the puzzle assuming covertly more specified Ordering Sources: Spending 10,000 euros on a buffet in the given scenario is not good, considering all the context information, and using the 'overall' / primarily linguistic success of the conference as the Ordering Source. The five sentences differ only in which part/aspect - of the Ordering Source and of the other context information - is overtly repeated in the *good*-predication itself. None of that information is in conflict with anything from the context.

The case of 'SPENDING GOOD', (97-b) ((151-c) below), (147-b) ((151-d) below), (148-b) ((151-e) below) and (150-b) ((151-f) below) is different:

(151) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. 'SPENDING GOOD':

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. ??Es wäre natürlich gut, wenn wir **das ganze Geld** /
it would-be of-course good if we the whole money /
alles von dem Budget für ein Luxus-Buffet ausgeben. Aber
all from the budget for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good if we spent all of the money/budget on a luxury buffet. But unfortunately there are no talks then.'

d. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz, wenn wir 10.000 Euro für
for the success the-GEN conference if we 10,000 euros for
ein Luxus-Buffet ausgeben. Aber leider gibt es dann keine
a luxury-buffet spend but sadly gives it then no
Talks.
talks
'It would of course be good for the success of the conference if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

e. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz in kulinarischer Hinsicht,
for the success the-GEN conference in culinary respect
wenn wir 10.000 Euro für ein Luxus-Buffet ausgeben. Aber
if we 10,000 euros for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good for the success of the conference culinarily if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

f. Es wäre natürlich gut
it would-be of-course good
für den Erfolg der Konferenz in kulinarischer Hinsicht,
for the success the-GEN conference in culinary respect
wenn wir **das ganze Geld** für ein Luxus-Buffet ausgeben.
if we the whole money for a luxury-buffet spend
Aber leider gibt es dann keine Talks.
but sadly gives it then no talks
'It would of course be good for the success of the conference culinarily if we spent all of the money on a luxury buffet. But unfortunately there are no talks then.'

The account discussed here assumes that all five of them are in a way in a slight conflict with the given context in that the Ordering Source that is actually used

for interpreting the sentence overrides the preferences given in the scenario. In 'SPENDING GOOD' and (151-c), this actual Ordering Source would be underspecified, in (151-d) less so and in the other two sentences it would be fully specified. This alone doesn't have to be problematic, depending on general assumptions on the relation of context and Ordering Source, and covert material. The problem is that if these five sentences really had the same underlying meaning, the acceptability judgements are expected to be parallel (all are supposed to be accepted), but they are not.

First, we saw in subsection 3.2.4 that (151-c) is not accepted or only marginally possible for most German speakers. An account in terms of covertly more specified Ordering Sources offers no explanation whatsoever for this. But the problem goes deeper: If there was some hidden factor that I can't think of right now and that would explain the unacceptability of (151-c) (without resorting to different Modal Bases as I will do in the upcoming subsections 4.6.1 and 4.6.2), then this factor should also render (151-f) unacceptable: (151-c) and (151-f) are exactly the same from the point of view of the account discussed in this section, (151-f) just spells out the covert Ordering Source of (151-c). So, if an additional intervening factor should distinguish these sentences (with the repeated information that 10,000 euros is all of the money) from the other ones (without this information repeated), they are at least expected to pattern together, i.e. they should both be judged less or not acceptable due to this unknown factor, but (151-f) is not.

To put this differently, (151-c) cannot be using the Ordering Source of (151-f) - goodness in terms of the culinary success of the conference - since this is the only surface difference between the two sentences and therefore the only available source of the different judgements. Under the account discussed here, (151-c) is equivalent to (151-f). This is incompatible with the fact that (151-c) is marginal, but (151-f) is perfect in SCENARIO 'CONFERENCE'. More specified Ordering Sources do have the power to change acceptability judgements of *good*-predications, but this is not what is going on with (151-c) or 'SPENDING GOOD'. (151-e) and (151-f) with their precise overt Ordering Source *für den Erfolg der Konferenz in kulinarischer Hinsicht* (for the culinary success of the conference) are so to say 'unproblematically true', i.e. they are true in an 'overall' sense, their acceptability is expected, while 'SPENDING GOOD' remains 'problematically true' and repeating the information that 10,000 euros is all of the money, as in (151-c) which is not or less acceptable, makes the puzzle disappear. The following discussion will build on this observation.

4.6 Different Modal Bases

4.6.1 Laissez-faire Modal Bases

We have seen in the previous two subsections that Ordering Source based accounts face the problem of restriction - which Ordering Sources are NOT available. When we try and deal with it - as in the account assuming covertly more specified Ordering Sources discussed in 4.5.2 -, they can't explain the influence of repeating context information nor its dissolving when combined with overt specified Ordering Sources. In the present subsection, I will start from the point of repeated context information and argue that a Modal Base based account can deal with this data. Then, I will show that this account faces a challenge of restriction that is parallel to the one we saw for Ordering Source based accounts - which Modal Bases are NOT available. The next subsection, 4.6.2, will give a sketch of a possible solution to this problem.

To repeat the crucial point from subsection 3.2.4, there is a stark contrast in acceptability between the original 'SPENDING GOOD' and (97-b) where *10.000 Euro* is exchanged with *das ganze Geld / alles von dem Budget* (all of the money/budget). The two sentences are repeated below as (152-a) and (152-b).

(152) a. Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks
'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

b. ??Es wäre natürlich gut, wenn wir **das ganze Geld** /
it would-be of-course good if we the whole money /
alles von dem Budget für ein Luxus-Buffet ausgeben. Aber
all from the budget for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good if we spent all of the money/budget on a luxury buffet. But unfortunately there are no talks then.'

While almost everyone accepted (152-a)(='SPENDING GOOD'), the clear majority of the interviewed German speakers reported that (152-b) was less acceptable - the reactions varied from very strong rejection ('nonsense') to finding the sentence 'kind of weird'.[52]

[52] I don't try to explain the judgements of the minority who accepted (152-b) - possibly, for these people a Ordering Source based account is on the right track after all, or the two factors intervene in some way.

Since the only difference between the two sentences is the repetition of a fact from the utterance world (that 10,000 euros is all of the money), it seems natural to explain the puzzling acceptability of 'SPENDING GOOD' with ignorance of this information. The pre-theoretic idea is that somehow when interpreting 'SPENDING GOOD' the information that 10,000 euros is all the money is ignored, forgotten or faded out from the context. The paraphrase for 'SPENDING GOOD' from section 1.3 that captures this intuition is (15), repeated as (153).

(153) If we ignore the fact that 10,000 euros is all the money we have and leave everything else as it is, then the world in which we spend 10,000 euros on a buffet is good.

The idea is that 'SPENDING NOT GOOD' takes everything from the context as a Modal Base, as expected, while 'SPENDING GOOD' uses everything except the fact that 10,000 euros is all money available.[53] A solution along the lines of (153) challenges the idea that the Modal Base of *good*-predications consists of the salient information about the world of utterance (here: the scenario; e.g. that we have a budget of 10,000 euros) plus general world knowledge (e.g. that qualified speakers don't give talks without at least travel refunds). It is clear and salient because of the context that 10,000 euros IS all the money, so every world from the set of worlds where (i) we spend that money on a buffet and where (ii) everything salient from the context and (iii) everything we know as general world knowledge is also the case, is such that we don't have talks. These worlds are low on the Ordering Scale of goodness with respect to the success of the conference.

There are two slightly different formulations of the solution suggested here that might lead to technically different approaches: One might say that not all the salient information from the context (i.e. in case of 'SPENDING GOOD': that 10,000 euros is all of the money) is taken to be part of the Modal Base, or that many pieces of information that we usually take to be salient from the context (because they've been mentioned not long before the relevant sentence) are not actually salient. The difference will come up again in section 5.2, but isn't relevant for the time being. Both variations of what I call a Modal Base based account face the same problem of restriction, one similar to the challenge for Ordering Source based accounts that I discussed in section 4.5. Modal Base based accounts ex-

[53] The intuitive partition of the context / worlds into 'facts' or 'pieces of information' is problematic without a discussion of what is meant by these terms, but this imprecision is unavoidable within the narrow scope of this thesis.

plain the acceptability of 'SPENDING GOOD' as well as the rejection of (152-b) (the latter is their unique selling point) - but they are in danger of predicting TOO MANY possible Modal Bases, as the following example shows:

(154) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. **The local university offers to pay all speakers and provide rooms and infrastructure without any strings attached. However, they won't do so, if we spend all of our initial budget on a buffet because they fear bad reputation.** Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. #Es wäre natürlich gut, wenn wir
it would-be of-course good if we
die ganzen 10.000 Euro für ein Luxus-Buffet ausgeben. Aber
the whole 10,000 euros for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good if we spent all of the 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

c. Es wäre natürlich nicht gut, wenn wir
it would-be of-course not good if we
die ganzen 10.000 Euro für ein Luxus-Buffet ausgeben.
the whole 10,000 euros for a luxury-buffet spend
Denn dann gibt es leider keine Talks.
because then gives it sadly no talks
'It would of course not be good if we spent all of the 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Sentences (154-b) and (154-c) are identical in the relevant respects to (97-b) and (97-c) - with 'partial' and negated 'overall' *good*-predications, respectively, and the repeated context information (here: *die ganzen 10.000 Euro* (all of the 10,000 euros)) in the embedded clause. (The slight change in formulation is necessary because of the scenario which might make other amounts of money salient.) But now these sentences are uttered in a different context: Additionally to the initial 10,000 euros, the first boldfaced sentence in the scenario (154-a) tells us that we now have the university potentially paying for rooms and speakers. The second boldfaced sentence in the scenario restricts this offer: If we spend the original 10,000 euros on a buffet, the university doesn't pay for any-

thing. This chancels out the effects of the first boldfaced sentence in the relevant respect, since the worlds where we spend 10,000 euros on a buffet and everything from the context is the case are again such that there are no talks. It's not surprising, therefore, that the judgements on (154-b) and (154-c) resemble those on the *ganz*-sentences, (97-b) and (97-c).

But it SHOULD surprise us if we assume a Modal Base based account to the puzzle without further restrictions: The idea was that the relation between context - the sum of all salient information from the world/situation of utterance - and Modal Base is more loose than we assumed in subsection 2.1.1, and it is possible to take all, 'SPENDING NOT GOOD', or only some parts, 'SPENDING GOOD', of the context into consideration when interpreting the modal sentence. If there was no restriction on the parts of the context that can and cannot be ignored for the Modal Base, quite a few Modal Bases should be available for every context that consists of multiple 'pieces of information' - namely any combination of their fading in and out. I will show now that one of them is expected to lead to the acceptability of (154-b) in scenario (154-a).

If there was a free choice between Modal Bases being restricted or not by each bit of information from the scenario individually - except that information repeated in the *if*-clause must be considered - the following is expected for scenario (154-a): A Modal Base 1 should be available that considers everything from the context (correctly predicting the acceptability of (154-c)). A possible Modal Base 2 that ignores only the fact that 10,000 euros is all of our initial budget is not available in this case because of the repetition of this fact within the antecedent of the *good*-predication, which is why the rejection of (154-b) seems to be expected at the first glance, considering only the unavailability of this Modal Base 2. So far, everything is as expected and parallel to (97-b) and (97-c) which also contain a *ganz*-phrase in the antecedent and are equivalent to (154-b) (154-c) in all relevant respects, but are uttered in the original SCENARIO 'CONFERENCE'.

However, if the fading in and out of parts of the context is not restricted, an additional Modal Base 3 should be available only in scenario (154-a) but not the original SCENARIO 'CONFERENCE': It consists of everything except the second bold sentence, i.e. in the resulting worlds it is the case that we have speakers and rooms covered by the university and 10,000 euros left for whichever other expenses. In these worlds, spending 10,000 euros on a luxury buffet leads to an even more successful conference, so 'under Modal Base 3' the resulting worlds

are as high as possible on a scale of goodness in terms of success of the conference (good talks, rooms and buffet) and (154-b) is expected to be accepted. Since the availability of Modal Base 3 overrides the unavailability of Modal Base 2, (154-b) should be accepted - parallel to what is assumed to happen with 'SPENDING GOOD' and Modal Base 2 according to a Laissez-faire Modal Bases account. But it is not, showing that if we want to assume different Modal Bases of 'SPENDING GOOD' and 'SPENDING NOT GOOD' to be responsible for the original puzzle, the Modal Bases available cannot be any number of combinations of fading in and out arbitrary bits of the context.

4.6.2 Exactly two Modal Bases

I argue for a Modal Base based account to the original puzzle on 'overall' and 'partial' goodness. It offers the best chances of getting rid of these intuitive terms while predicting my preliminary empirical findings - including the ones on repeated context information, see subsections 3.2.4 and 4.6.1. The questions that remain open are: (i) What are the restrictions on available Modal Bases, i.e. why is it possible to ignore the total amount of money for 'SPENDING GOOD', but not to ignore the university's demands from the second sentence in boldface in (154-a) for (154-b)? And (ii): How can the intuitively different Modal Bases be captured more formally, i.e. how do we have to change Kratzer (1977, 1981, 1986, 1991, 2012b)'s (see section 2.1) and/or Sode (2019)'s (see section 2.2) concepts in order to model the sentences of the puzzle? I will deal with the first question, (i), in the current subsection and leave question (ii) partially open in this thesis but offer some thoughts on it in section 5.2.

In order to tackle question (i), let's compare the 'bits of information' from the context we have found to be ignorable for the Modal Base (that 10,000 euros is all of the money - when it is not repeated in the embedded sentence of the *good*-predication) with the ones that aren't (the second of the boldfaced sentences in (154-a)=(155) alone; and that 10,000 euros is all of the money - when it IS repeated in the embedded sentence).

(155) SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. **The local university offers to pay all speakers and provide rooms and infrastructure without any strings attached. However, they won't do so, if we spend all of our initial budget on a buffet because they fear bad reputation.** Our primary interest is the linguistic success of the conference (i.e.

that there are good talks).

Since the two boldfaced sentences in (155) cancel each other out in the relevant respects, we are not in a position to decide whether both are part of the Modal Base or neither of them. The restriction on when 'that we only have 10,000 euros in total' is part of the Modal Base and when it isn't might be more helpful as a starting point: It cannot be ignored anymore as soon as it is directly included in the modal statement that uses the Modal Base. What if this is a general restriction?

That would mean that any potential Modal Base forming information from the context could be ignored as long as it wasn't repeated in the *good*-predication. Alternatively, everything from the context must be taken as a Modal Base, as in 'SPENDING NOT GOOD', so it is not possible for only a part of the not repeated information be considered for the Modal Base. To put it differently: What is part of the *good*-predication has to be a part of the Modal Base. And it is the case for the set of contextual restrictions that are not repeated in the *good*-predication that it is as a whole either considered or not considered for the Modal Base. This is why (154-b) isn't accepted: The Modal Base that would ignore one of the boldfaced sentences from (154-a) violates this principle and is therefore not available.

Note, however, that not all of the 'bits of information' from the scenario are candidates for the Modal Base, and the Modal Base does not exclusively consist of these restrictions: What still has to be considered from the context in any case is the information on preferences, i.e. the Ordering Source. And after the two 'sizes' of Modal Bases with respect to the contextual information are distinguished, they both have to be enriched with general world knowledge so that we, e.g., get the restriction 'that speakers don't give talks without at least travel refunds' in both cases. Bringing all of this together, we arrive at the following exactly two possible 'sizes' of Modal Bases:

- **Small Modal Base** (SMB): all possible worlds that are compatible with exactly
  - all of the context information and
  - general world knowledge
- **Large Modal Base** (LMB): all possible worlds that are compatible with exactly

- the information that follows from having the given goals (the Ordering Source)
- the information (assertions and implications) from the sentence embedded under *good* and
- general world knowledge

In the remaining subsection, I will show that this characterization of two sizes of Modal Bases that must remain extremely informal here already manages to predict the actual judgements on the original puzzle ('SPENDING GOOD' and 'SPENDING NOT GOOD') as well as its variation with repeated context information. I will illustrate this with the help of the following set of possible worlds with differences that are relevant for the puzzle:

(156)
a. w_i: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.
b. w_{ii}: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 500 euros on a nice buffet and 9,500 euros on speakers and infrastructure. There are good talks.
c. w_{iii}: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 50,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are good talks.
d. w_{iv}: We are organizing a conference; All our speakers agree to speak for free and carry the costs of their stay; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are good talks.
e. w_v: We've gained access to money that is meant for a conference because of a bureaucratic mistake; We hate the organizers and the topic of the planned conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.

Before moving on to the predictions of these two 'sizes' of Modal Bases, note first that this account is asymmetrical in that the Small Modal Base uses ALL of the information given in the context - in the case of my original 'SPENDING GOOD' it excludes all worlds above except w_i because of different restrictions, explained in more detail below -, while the Large Modal Base uses only a specific, non-arbitrary part of the information given in the context - it excludes less worlds, e.g. in the case of 'SPENDING GOOD', w_i AND w_{iii} pass, see below. There

is no clear evidence that this choice is tied to pragmatics, i.e. without further assumtions, both Modal Bases are predicted to be available for all instances of *good*-predications, and there are no cases of any other 'sizes' in between these two. While I am not strongly committed to my exact characterization of the criteria for this LMB-part from above, and the way this is modelled within a Kratzer (1977, 1981, 1986, 1991, 2012b) style semantics certainly needs further investigation (for first thoughts on this see section 5.2), the idea remains that there are concrete criteria a possible world has to fulfil in order to be able to be part of the Large Modal Base.

Secondly, note that while the terminology is a bit tricky, the Small Modal Base IS actually smaller than the Large Modal Base in that it contains less possible worlds to consider. It excludes MORE possible worlds, however, because it uses MORE restrictions, namely everything from the context.

Let's get to the part of the discussion where, after having excluded numerous other accounts, I show that the one I advocate actually solves the puzzle. Applied to the original puzzle - 'SPENDING GOOD' and 'SPENDING NOT GOOD' - as well as its version with repeated context information - (97-b) and (97-c) - the attested choice between only the SMB and the LMB correctly predicts the actual felicity judgements (though in the case of (97-b) and (97-c) for most but not all German speakers):

(157) a. SCENARIO 'CONFERENCE': We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the linguistic success of the conference (i.e. that there are good talks).

b. 'SPENDING GOOD':

Es wäre natürlich gut, wenn wir 10.000 Euro für ein
it would-be of-course good if we 10,000 euros for a
Luxus-Buffet ausgeben. Aber leider gibt es dann keine Talks.
luxury-buffet spend but sadly gives it then no talks

'It would of course be good if we spent 10,000 euros on a luxury buffet. But unfortunately there are no talks then.'

Sentence (157-b)= 'SPENDING GOOD' uses a LMB that consists of all possible worlds that are compatible with general world knowledge (speakers don't give talks without refunds, ...), the knowledge that our goal is to hold a conference successfully (following from the Ordering Source) and that there is the possi-

bility to spend 10,000 euros on a buffet (following from the *good*-predication). The fact from the context that 10,000 euros is all the money we have is - like all other context information that is not repeated - NOT part of the restrictions on possible worlds, so this LMB really IS larger in that it contains worlds where we have more money to spend. I.e. of the worlds above, w_i, w_{ii} and w_{iii} (where we have more money) pass the 'original restrictions', and the antecedent adds another restriction that kicks w_{ii} out, because of the conditional operator:

(158) a. w_i: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.

b. w_{ii}: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 500 euros on a nice buffet and 9,500 euros on speakers and infrastructure. There are good talks.

c. w_{iii}: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 50,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are good talks.

w_{iv}, on the other hand, is excluded even by this LMB, because that speakers don't give talks without refunds is general world knowledge (this certainly needs specification) which is even considered by LMBs:

(159) w_{iv}: We are organizing a conference; All our speakers agree to speak for free and carry the costs of their stay; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are good talks.

w_v is excluded by this LMB because it is in conflict with the Ordering Source / information that follows directly from it:

(160) w_v: We've gained access to money that is meant for a conference because of a bureaucratic mistake; We hate the organizers and the topic of the planned conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.

Of the remaining worlds, many will be like w_{iii} (where we have x more money), and these worlds are high on a scale of success of the conference, since in many of them we have good talks AND a good buffet, so it it plausible that 'SPENDING GOOD' turns out true. The fact that the total amount of the money is ignored

distinguishes 'SPENDING GOOD' from (97-b) = (163-b), and the fact that the choice fell on the LMB distinguishes it from 'SPENDING NOT GOOD' = (161-b).

(161) a. SCENARIO 'CONFERENCE'

b. 'SPENDING NOT GOOD':

Es wäre natürlich nicht gut, wenn wir 10.000 Euro für
it would-be of-course not good if we 10,000 euros for
ein Luxus-Buffet ausgeben. Denn dann gibt es leider keine
a luxury-buffet spend because then gives it sadly no
Talks.
talks

'It would of course not be good if we spent 10,000 euros on a luxury buffet, because unfortunately there are no talks then.'

Sentence (161-b) = 'SPENDING NOT GOOD' uses a SMB. It follows directly from the SCENARIO 'CONFERENCE' = (97-a) and contains all possible worlds that are compatible with all of the context restrictions, also with the fact that 10,000 euros is all the money we have, and general world knowledge. Of the possible worlds above, w_{iv} and w_v are excluded, like in the case of a LMB, because they contradict restrictions from the context. Additionally, also w_{iii} (where we have more money) is excluded, because we consider ALL restrictions from the context now. The antecedent kicks out w_{ii} again, and we are left with ONLY w_i:

(162) a. w_i: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.

Considering only these worlds, it is NOT GOOD if we spend 10,000 euros on a buffet. (161-b) = 'SPENDING NOT GOOD' turns out the same as (165-b) = (97-c) because if everything from the context is considered anyway, it does not matter what of it is repeated in the *good*-predication.

(163) a. SCENARIO 'CONFERENCE'

b. ??Es wäre natürlich gut, wenn wir **das ganze Geld** /
it would-be of-course good if we the whole money /
alles von dem Budget für ein Luxus-Buffet ausgeben. Aber
all from the budget for a luxury-buffet spend but
leider gibt es dann keine Talks.
sadly gives it then no talks
'It would of course be good if we spent all of the money/budget on a luxury buffet. But unfortunately there are no talks then.'
(=(97-b))

Sentence (163-b) = (97-b) uses a LMB that consists of all possible worlds that are compatible with general world knowledge (speakers don't give talks without at least travel refunds, ...), the fact that we are organizing a conference (following from the Ordering Source) and that there is the possibility to spend 10,000 euros on a buffet (following from the *good*-predication), **plus** - and this distinguishes it from (157-b) = 'SPENDING GOOD' and leads to its rejection - the information that 10,000 euros is all the money we have - because that bit of information is repeated in the embedded sentence via *das ganze Geld / alles von dem Budget* (all of the money/budget). So this LMB is just formally one, it is 'by accident' in the relevant respects just as restricted as the SMB of (165-b) = (97-c) and 'SPENDING NOT GOOD', which is why spending the money on a buffet comes out to be not good.
Of the worlds above, w_{iv} is excluded because it contradicts general world knowledge; w_v because it contradicts the OS; w_{iii} **because that 10,000 euros is all is repeated in the antecedent**, and w_{ii} is kicked out by the antecedent again. We are left with only w_i EVEN THOUGH we are dealing with a LMB, which is judged to be not good:

(164) w_i: We are organizing a conference; Speakers don't give talks without refunds; We have exactly 10,000 euros to spend in total; We spend 10,000 euros on a luxury buffet. There are no talks.

(165) a. SCENARIO 'CONFERENCE'

b. Es wäre natürlich nicht gut, wenn wir **das ganze Geld** / it would-be of-course not good if we the whole money / **alles von dem Budget** für ein Luxus-Buffet ausgeben. Denn all from the budget for a luxury-buffet spend because dann gibt es leider keine Talks. then gives it sadly no talks
'It would of course not be good if we spent all of the money/budget on a luxury buffet, because unfortunately there are no talks then.'
(=(97-c))

And finally, sentence (165-b) = (97-c) uses a SMB. It follows directly from the SCENARIO 'CONFERENCE' = (97-a) and contains all possible worlds that are compatible with its restrictions, including with the fact that 10,000 euros is all the money we have, and general world knowledge. w_{iii}, w_{iv} and w_v are all excluded for the same reasons as before, w_{ii} by the antecedent restriction, and we arrive at only w_i again. We are considering only worlds that are like w_i in the relevant respects, and these are NOT GOOD on the given scale of success of the conference, so that (165-b) = (97-c) turns out the same as (161-b) = 'SPENDING NOT

GOOD'.

We have seen that only a Modal Base based account to the puzzle explains the judgements on repeated context information, and that a restriction to two sizes of Modal Bases is necessary to explain why it is not possible to use arbitrary parts of the context information as a Modal Base. My concepts of LMB and SMB predict the original puzzle as well as it's diminishing with repeated context information. However, it has not yet become clear what the theoretical status of these concepts is, i.e. whether they have to be assumed as additional theoretical entities or can be modelled via already assumed concepts supported by independent evidence. This question will remain open to some degree, but be addressed in the following chapter.

5 Final remarks and Outlook

I have given arguments in favour of a Modal Base based solution to the puzzle of 'overall' versus 'partial' goodness, following (15) of all the original informal paraphrases, repeated as (166).

(166) If we ignore the fact that 10,000 euros is all the money we have and leave everything else as it is, then the world in which we spend 10,000 euros on a buffet is good.

However, it has turned out in the discussion that excluding one bit of information from the Modal Base as (166) suggests doesn't have explanatory power. In order to predict which Modal Bases are available - and especially which are not -, I suggest a rule according to which exactly two sizes of Modal Bases, Small Modal Base and Large Modal Base, are available. The Small Modal Base considers all restrictions from the context, so the set of worlds that are quantified over is as small as predicted by a standard Kratzer (1977, 1981, 1986, 1991, 2012b) modal semantics. The Large Modal Base, on the other hand, isn't the Small Modal Base minus the information that we only have 10,000 dollars as I initially assumed - rather, it disregards the concrete context of utterance completely and only considers restrictions from general world knowledge, the Ordering Source and what is asserted or implied by the embedded sentence of the utterance, e.g. 'SPENDING GOOD'. We have already seen in the last subsection of the discussion, 4.6.2, that an approach along these lines correctly predicts the original puzzle as well as the version with repeated context information (*das ganze Geld* (all of the money)) that I introduced in subsection 3.2.4. While

most of the accounts discussed in chapter 4 predict the right acceptability pattern for the original puzzle, none of them straightforwardly predicts restrictions on which Modal Bases are not available, and no other account that I discussed predicts the role of repeated context information, so I consider the latter the unique selling point of an LMB/SMB-account.

However, my account must for the time being remain imprecise in a number of ways:

(I) Not all of the puzzling semantic behaviour of 'SPENDING GOOD' and 'SPENDING NOT GOOD' discussed in chapter 3 has been explained. I will refer back to this chapter in section 5.1 and briefly touch upon the question how we might deal with the puzzle's further semantic behaviour in the light of an LMB/SMB-account.

(II) I have not at all discussed the ontological and methodological status of Small Modal Base and Large Modal Base. I.e., should we introduce these as new and independent concepts into modal semantics, can they be modelled via a third conversational background without changing the initial concepts of Modal Base and Ordering Source, or are they merely another way to put a certain relation between common ground and Modal Base? I will not decide between these options in this thesis, but briefly sketch each possibility in section 5.2.

And finally (III), I have restricted all claims in this thesis on German *gut*(good)-predications. I will speculate upon the question of whether Small and Large Modal Base might be a broader phenomenon in section 5.3.

5.1 More data explained

In this section, I will briefly reconnect the SMB/LMB solution with the closer look to the puzzle I took in chapter 3, specifically sections 3.2 and 3.3, and ask which aspects of the puzzle's behaviour can now be explained, and which remain open.

First, in subsection 3.2.1 we observed that fixedness of the truth value of the embedded sentence - both in the case of counterfactual and factive versions of the puzzle - leads to more variation than with the original example and to unclear judgements as to whether the puzzle still holds. I suspected a third, intervening factor that enables the puzzle - now we can say: that enables the LMB - and that

is less likely to come along with settled truth conditions. Since I don't answer the question of what makes *good*-predications prone to the availability of LMBs (but see subsection 5.3.2), I can't offer an explanation for this behaviour, either. However, the observation that fixedness of the truth value of the embedded sentence is indirectly related to the availability of LMBs is important to keep in mind for further investigation and comparison with other modals that might feature puzzles of this kind.

Next, we saw in subsection 3.2.2 that subjunctive doesn't influence the availability of the puzzle. This proved to be helpful in the argumentation against a Lassiter (2017) style approach in section 4.4. It is also important to keep this in mind in the further discussion of my puzzle compared to other constructions that might show similar behaviour (subsection 5.3.2): A phenomenon is only an instance of the puzzle discussed in this thesis when it is NOT tied to subjunctive - for when it is, a shift to a world with revised wishes or beliefs (Stalnaker (2014)) might be an easier explanation.

With regard to modifiers that may appear in the sentences of the puzzle, we saw in subsection 3.2.3 that both 'SPENDING GOOD' and 'SPENDING NOT GOOD' improve with *natürlich* (of course) as well as stressed *eigentlich* (actually). I noted that the two sentences are subject to different pragmatic reasons to strengthen a proposition. However, it is strengthening that happens in both cases, which reinforces the puzzle and delivers an argument against unsureness or vagueness as a reason for the puzzle. There are really two distinct meanings - the one based on a LMB and the one based on a SMB - of *good*-predications. Modifiers that may only appear in one of the sentences, on the other hand - *an sich* (per se), *insgesamt* (in total) - disambiguate between the two. This fits the idea that both sizes of Modal Bases are normally available - these modifiers cancel one of them. Examples of this can be seen in section 3.3, where I discussed some pragmatic and information structural properties of the puzzle. It might be worth looking into focus related to the puzzle now that we have the concepts of LMB and SMB: It seems the question under discussion - the salient purpose of the conversation / 'what we want to find out' - might be set to for which MB-size we get which goodness-outcome.

Finally, subsection 3.2.4 turned out to be most crucial for the discussion: The observation that repeating the information that only 10,000 dollars are available in total makes the puzzle disappear played a huge role for the decision in favour of a Modal Base based account as contrary to a Ordering Source based account.

5.2 Three ways of understanding SMB and LMB

I have been using the terms 'Large Modal Base' and 'Small Modal Base' freely and somewhat rashly since section 4.6. Only now will I elaborate on what I might mean when I claim that there 'are' these two Modal Bases. There are three ways in which these concepts might be understood on an ontological/methodological level, and I will take the position that the decision between them is a question of deeper issues concerning modality as well as methodological preferences. The three different starting points towards modelling LMB and SMB are equivalent in terms of predictions for the puzzle, as I will show on the basis of the following example - an instance of my puzzle that has nothing to do with conferences for a change:

(167) a. SCENARIO: (p1) Toni has an exam tomorrow. (p2a) Chapter 1 of 'Molecular Biology Advanced' will be tested. (p2b) Chapter 2 of 'Molecular Biology Advanced' will be tested. (p2c) Nothing else will be tested. (p3) Toni has 5 more hours to study for it. (p4) Toni hasn't done anything for it so far. (p5) Chapter 1 has 50 pages. (p6) Chapter 1 counts 90 percent. (p7) Chapter 2 has 50 pages. (p8) Chapter 2 counts 10 percent. (p9) Chapters 1 and 2 are on the same level of learning speed. (p10) In 5 hours, Toni can study 50 pages of 'Molecular Biology Advanced' at most. (p11) Toni's goal is to pass the test, the more points the better. (p12) Whenever a student is exactly between grades, the professor gives them the better grade only if some questions in both parts of the test are correctly answered.

b. Es wäre natürlich gut, wenn Toni Kapitel 2 von
it would-be of-course good if Toni chapter 2 of
'Molecular Biology Advanced', das morgen zur Prüfung
'Molecular Biology Advanced' that tomorrow for-the exam
kommt, lernt. (Aber leider geht sich dann das
comes studies (But unfortunately goes REFL then the
wichtigere Kapitel 1 nicht mehr aus.)
more-important chapter 1 not anymore out
'It would of course be good if Toni studied chapter 2 of 'Molecular Biology Advanced' that is tested in the exam tomorrow. (But unfortunately there isn't enough time for the more important chapter 1 then.)'

c. Es wäre natürlich nicht gut, wenn Toni Kapitel 2 von
it would-be of-course not good if Toni chapter 2 of
'Molecular Biology Advanced', das morgen zur Prüfung
'Molecular Biology Advanced' that tomorrow for-the exam

kommt, lernt. (Denn leider geht sich dann das
comes studies because unfortunately goes REFL then the
wichtigere Kapitel 1 nicht mehr aus.)
more-important chapter 1 not anymore out
'It would of course not be good if Toni studied chapter 2 of 'Molecular Biology Advanced' that is tested in the exam tomorrow. (Because unfortunately there isn't enough time for the more important chapter 1 then.)'

d. #Es wäre natürlich gut, wenn Toni Kapitel 1 und 2 von
it would-be of-course good if Toni chapters 1 and 2 of
'Molecular Biology Advanced', die morgen zur Prüfung
'Molecular Biology Advanced' that tomorrow for-the exam
kommen, jeweils zur Hälfte lernt. (Denn zwischen zwei
come each at-the half studies because between two
Noten entscheidet ja, ob man beide Teile zumindest ein
grades decides PART if one both parts at-least a
bisschen kann.)
bit can
'It would of course be good if Toni studied chapters 1 and 2 of 'Molecular Biology Advanced' that are tested in the exam tomorrow both halfway. (Because if you're between grades they decide based on whether you know both parts at least a bit.)'

The scenario for this instance of the overall/partial goodness puzzle is more artificial than the original one since I have tried to separate 'bits of information' - a whole new issue being raised by the question of what these are, and how we are to separate them! - in the context at least a bit more clearly. This is helpful for the upcoming comparison between starting points for modelling LMB/SMB. I didn't do any interviews on this one, but my own intuitions are completely clear in that (167-b) and (167-c) are both perfect in (167-a), while (167-d) is out.

5.2.1 Really two choices of Modal Bases

The probably most salient interpretation of my claim that there are LMB and SMB is that both are just always (in all cases of *good*-predications, German or in general, or in all cases of a broader class of phenomena - see upcoming section 5.3) available in the sense that a speaker has the choice to interpret a sentence based on a LMB or a SMB in all cases. Additional pragmatical principles lead to the outcome that most of the time all sentences that are true under at least one of the two Modal Bases are accepted due to benevolent interpretation because of the principle of charity. This might at first sight seem predicted by Kratzer (1977, 1981, 1986, 1991, 2012b)'s original account that already allows

for 'differently sized' Modal Bases, see subsection 2.1.1. But it is not, since: (i) If Kratzer (1977, 1981, 1986, 1991, 2012b) is interpreted strictly wrt. Modal Bases, a unique context of utterance should result in a unique choice of Modal Base. There is no difference in context between 'SPENDING GOOD' and 'SPENDING NOT GOOD' nor between (167-b) and (167-c), so only one Modal Base - classically my Small Modal Base that considers everything from the context - should be available. And (ii), if Kratzer (1977, 1981, 1986, 1991, 2012b) is interpreted or changed in such a way that the framework allows for different choices of Modal Bases in one and the same context, the restriction on only two 'sizes' is unaccounted for.

The demonstration that this version of my account explains the acceptability pattern in (167-b-d) is quite parallel to what I did for the original puzzle in subsection 4.6.2, so will only give a short version here: In scenario (167-a) we have the choice between a SMB and a LMB, a SMB (considering everything from the context) leads to the truth of (167-c), a LMB (considering only that there is a test that includes chapter 2, p1 and p2b, and the goal p11) to the truth of (167-b). For (167-d) to come out true, we would need a Medium Modal Base considering from the context some but not all non-repeated information: additionally to the repeated LMB-included p1, p2a, p2b and p11: p2c, p3, p4, definitely p12, possibly others, but clearly not p6 or p8 (that the SMB does consider). But there is no such Modal Base, so (167-d) is expected to be unacceptable, as it is.

This interpretation of SMB and LMB as new entities in modal semantics is most straightforward for the kind of puzzle I discussed. Each of the Modal Bases might be modelled like Kratzer (1977, 1981, 1986, 1991, 2012b)'s original Modal Base with less contextual restrictions on the LMB and possibly a disjunction between the two at the end when it comes to the question of acceptability of a given sentence. The downside of this is that it is a rather substantial change in modal semantics based on so far not so much data, and there is no independent evidence for it (except, maybe, for conflicting wishes, see subsection 3.1.2 and section 5.3).

5.2.2 A loose relation between context and Modal Base

The second option is to leave the concept of Modal Base as it is in Kratzer (1977, 1981, 1986, 1991, 2012b) and shift the problem to the interface between context and Modal Base. The idea is to use only one term 'Modal Base' while claiming two different ways in which it may be built from a given context: When uttering

a *good*-predication, one has the choice - under this understanding of SMB and LMB - between considering everything from the context for the Modal Base (the output is what I have called a SMB) or just the utterance itself plus general world knowledge (with the output of what I have called a LMB). Importantly, no in-between choice of what to consider from the context must be available, i.e. the relation between context and Modal Base is assumed to be looser than under a classical interpretation of Kratzer (1977, 1981, 1986, 1991, 2012b), but not arbitrarily loose. Before mentioning a possible advantage and disadvantage of this take on LMB and SMB, let's go through how this version manages to solve the puzzle in (167):

One option is to consider everything from scenario (167-a) for a Modal Base in the sense of Kratzer (1977, 1981, 1986, 1991, 2012b). Doing so, the possible worlds are restricted to ones where everything from p1 to p12 is the case, and the *wenn*(if)-sentence, analogous to the antecedent in a standard conditional, adds another restriction: The worlds where p1-p12 is the case and where Toni studies chapter 2 are such that they don't pass the exam because of the 90 percent chapter 1 counts. This result is very low on a scale of goodness that prioritizes passing the exam, p11. The truth of (167-c) follows directly.

The second option is to consider only the goal to pass the exam with the best possible score, p11, as well as general world knowledge (e.g. that no brain implant tells Toni the right answers) and what can concluded directly from the utterance: That Toni has an exam, p1, and that chapter 2 will be tested, p2b. The worlds where these two things are the case and Toni does - adding the antecedent property - study chapter 2 are generally/typically high on the given scale of goodness, since we disregard all other information from the context. This is why (167-b) is predicted to be accepted, as it is, under this interpretation of LMB/SMB.

Finally, (167-d) is unacceptable and predicted to be so under this variant of the LMB/SMB-account, since it is not allowed to consider only a part of the immediate context that is not repeated in the utterance for the Modal Base.

The weak point of the context-version of LMB/SMB is, naturally, that it doesn't have any additional explanatory power, i.e. it doesn't answer the question of why only these specific parts of the context may be considered, or to put it differently, why some context information seems to come in a package such that it can only be considered or not, as a whole, but not untied, i.e., grossly over-

simplified, the 'space of what is the case in a given scenario' cannot consist of primitive elements in this case, but there must be some kind of hierarchy that groups certain 'bits of information' together. It might be possible to model this via sub-situations or sub-events.

This version may seem closer to Kratzer (1977, 1981, 1986, 1991, 2012b) since it doesn't come with the new terminology, but it is actually equivalent to the version in 5.2.1, 'Modal Base that was formed by considering everything' just coming back to the SMB, and 'Modal Base considering only a specific part' to the LMB. It might, on the one hand, be practical having shorter terms for these concepts, on the other hand, we might want to stick to existing terminology.

5.2.3 A third conversational background

The third option on the way towards proper modelling of SMB and LMB is one that has been chosen in the case of other modal puzzles, i.e. probability puzzles (see subsection 3.1.1, Yalcin (2007) and Cariani et al. (2013), amongst others). The idea is to introduce a third conversational background, in addition to Modal Base and Ordering Source, to deal with the puzzling cases, while not having to change Kratzer (1977, 1981, 1986, 1991, 2012b)'s concepts and while predicting the standard cases like they do. (Cariani et al. (2013) call this a 'conservative extension'.) It is tempting to adopt one of these accounts for overall/partial goodness: If one and the same third conversational background could solve more than one type of puzzle, that version of modelling SMB and LMB would be less stipulated and highly preferable over the versions sketched in 5.2.1 and 5.2.2.

While I don't see a way in which a third conversational background meant to solve probability puzzles - where the agent lacks an important bit of knowledge wrt. what is the case and must therefore base their decision on probabilities (subsection 3.1.1) - might also solve my puzzle straightforwardly, solutions to contrary to duty obligations might seem a better fit at the first glance: These puzzles are discussed by Arregui (2010), amongst others, building on Chisholm (1963), and deal with the fact that we "need a way of deciding, not only what we ought to do, but also what we ought to do after we fail to do some of the things we ought to do" (Chisholm (1963), pp. 35–36), as the compatibility of the following sentences shows:

(168) a. Sara should return the library book on time. (=Arregui (2010)'s (1-a))

b. If Sara returns the library book late, she should pay a fine. (=Arregui (2010)'s (1-b))
c. It should be the case that, if Sara returns the library book on time, she does not pay a fine. (=Arregui (2010)'s (1-c))
d. Sara returns the library book late. (=Arregui (2010)'s (1-d))

(168-b) is a Contrary to Duty Imperative, i.e. it says what should be the case in a non-ideal world (where Sara doesn't return the book on time). These certainly exist in natural language, and together with (168-d) (the actual world is non-ideal) one will truthfully conclude that Sara should pay a fine. However, this is incompatible with the conclusion of (168-a) and (168-c), that Sara should not pay a fine. It seems that in one way it should - ideally - be the case that Sara doesn't pay a fine because it should - ideally - be the case that she returns the book on time; but in another way, considering that the actual world is not ideal, in fact, it should - 'pragmatically' - be the case that she does pay a fine.

While both contrary to duty obligations and my puzzle roughly seem to have something to do with overall versus non-optimal preferences, they are actually opposed in one important respect: Solutions to Contrary to Duty Obligations have to make it possible to talk about the next best option after the best ones (where Sara returns the book in time) are excluded. Intuitively, the original Modal Base, leading to the optimum, must be FURTHER restricted in these cases ('and it is not the case that she returns it in time') while the classic Modal Base (SMB) would have to be turned into a LESS restricted one by the third Conversational Background in my cases in order to yield a LMB. I.e., my puzzle is not about what is the next best option when we can't have talks anyway; it's about the case where we do have talks no matter how we decide because we don't consider budgetary restrictions.

More generally, for a third conversational background to be helpful in my case, if it is supposed to intervene 'between' Modal Base and Ordering Source, it would have to do one of (i) and (ii): It could, (i), cancel a part of the restrictions that determined the original Modal Base (SMB). However, it is not clear how this inclusion of a specific subgroup of already excluded worlds would work out technically. And this is not at all parallel to any other solutions to modal puzzles. Or, (ii), the fewer restrictions that lead to the LMB would have to happen first and always, and restrictions for the classic / Small Modal Base would be the ones to optionally intervene. In this case, the new part compared to Kratzer (1977, 1981, 1986, 1991, 2012b) is the first step, which may be interpreted as

a more substantial change to existing frameworks, and it doesn't easily fall together with other proposed third Conversational Backgrounds, either. The costs of (ii) seem lower, which is why I'm going to apply this version to the exam-puzzle in (167):

When a sentence like (167-b) or (167-c) is uttered, we can imagine the few restrictions that lead to the LMB to apply first and mandatorily. We arrive at all worlds where Toni has an exam tomorrow, p1, and chapter 2 is tested, p2b. If we stop at this point, the classic / Small Modal Base never comes into play and we move straight to the Ordering Source. The stereotypical worlds in which p1 and p2b are the case and Toni does study chapter 2 (the contribution of the antecedent) are high on the scale of goodness, p11. This is why (167-b) comes out true. There is, however a second option, namely that between the LMB and the Ordering Source, the SMB restricts the possible worlds further, including everything from p1 to p12. If the outcome worlds are then further restricted to ones where Toni does study chapter 2, the stereotypical worlds resulting from this are low on the given scale of goodness, which is why (167-c) is fine, too. (167-d) is not acceptable because there is no intermediate step between LMB and SMB.

One might argue that this is a more elegant version of a SMB/LMB account, but there are also downsides to this one: Arguably, the third conversational background is in this case no conservative extension (like Cariani et al. (2013)'s) to Kratzer (1977, 1981, 1986, 1991, 2012b), because the standard Modal Base, SMB, is only optional. Also, it is not clear, what its being optional means exactly: Do we always have the choice to apply it or not, and if so, why? Or is it always there but doesn't have an effect in some cases? And if so, how comes that in the same scenario it sometimes does and sometimes doesn't?

We have seen that none of the three options of framing a SMB/LMB based account comes without costs, and I'm not in a position at this point to decide between them. This is one of the many questions concerning overall/partial goodness puzzles that must remain open for further research.

5.3 A broader phenomenon?

5.3.1 Cross-linguistic status

I have restricted my claims to German for the purpose of this thesis. However, it seems highly unlikely that the puzzle I have described is language specific. This

is because any Ordering Source or Modal Base based solution to the puzzle uses and in some way expands or changes principled and supposedly language independent concepts of modality. There is no reason - that I see - to assume e.g. in the case of my solution that there are in general LMB and SMB available on a universal, cognitive level, but for some independent reason the LMB is blocked in all or most languages except for German. I am not aware of any such independent reason, so I assume that the prediction of my account (and most other reasonable accounts) is that puzzles of this kind are a typologically broad phenomenon. I have not collected data on this prediction in any close to systematic way - actually I cannot even exclude the possibility that some of the speaker variation is due to variation between German dialects -, but some informal conversations suggest that Polish, Persian and English might feature a close equivalent of the puzzle, but Hebrew doesn't.[54] Should it turn out that the kind of puzzle I describe is specific to some languages after all, that would be puzzling all over again, not just for a LMB/SMB account, but for German modality in general: What makes this language so special that universal properties of a subclass of modality are suspended? Or to put it more precisely: What makes all other languages so different that the universal availability of the LMB (since there is no such thing as universal unavailability except for...) is blocked in all of them?[55]

Some factors that might potentially influence the availability of overall/partial goodness puzzles in some languages but not others are subjunctive and the way it is linked to the settledness of truth or falsity of the antecedent property in conditionals - we saw that this connection is particularly loose in German in (sub-)sections 2.2, 3.2.2 and 4.4 - as well as potentially other language specific properties of conditionals, focus and implicatures.

5.3.2 Parallels to other constructions

Coming back to the parallel between overall versus partial goodness as in my puzzle on the one hand and 'wanting, ideally' and 'wanting, realistically' as in conflicting wishes puzzles (see subsection 3.1.2), it is tempting to strengthen the SMB/LMB-claim to apply it to modality in general. This would be very welcome in the spirit of unification. I will not make any attempts in this direction in this thesis, but mention two observations that might be relevant for future dis-

[54] I thank Jordan Chark, Roni Katzir, Shahin Mashayekhi and Marcin Wagiel for their judgements and comments.

[55] Note also that a restriction of puzzles on overall/partial goodness to German would mess up any attempt to link the phenomenon to puzzles on conflicting wishes (as sketched in the next subsection, 5.3.2), since these have typically been described for English.

cussion:

The treatment of *good*-predications as conditionals in some (Sode (2019)) or all respects[56] suggests that ordinary conditionals might give rise to similar puzzles. However, they do not or at least not as clearly (following my own intuition), as the following variation of the original puzzle by Nina Haslinger (p.c.) to whom I owe this observation shows:

(169) a. SCENARIO: We have 10,000 euros in total to spend for a conference. We are free to distribute the money between the location, payments and refunds for speakers and food and drinks. Our primary interest is the *linguistic* success of the conference (i.e. that there are good talks).

b. ??Wenn wir 10.000 Euro für ein Luxusbuffet ausgeben
if we 10,000 euros for a luxury-buffet spend
(würden), haben(/hätten) wir vielleicht noch Geld für
(would) have(would-have) we maybe still money for
Talks, aber nicht genug. **intended: LMB**
talks but not enough
'If we spend/spent 10,000 euros on a luxury buffet, we might have some money left for talks, but not enough.'

c. Wenn wir 10.000 Euro für ein Luxusbuffet ausgeben, bleibt
if we 10,000 euros for a luxury-buffet spend stays
für die Talks kein Geld mehr übrig. **SMB, as predicted**
for the talks no money anymore left
'If we spend 10,000 euros on a luxury buffet, there is no money left for the talks.'

d. #Wenn wir das ganze Geld für ein Luxusbuffet ausgeben,
if we the whole money for a luxury-buffet spend
haben wir vielleicht noch Geld für Talks, aber nicht
have we maybe still money for talks but not
genug. **LMB, as predicted**
enough
'If we spend all of the money on a luxury buffet, we might have some money left for talks, but not enough.'

e. Wenn wir das ganze Geld für ein Luxusbuffet ausgeben,
if we the whole money for a luxury-buffet spend
bleibt für die Talks kein Geld mehr übrig. **SMB, as pred.**
stays for the talks no money anymore left

[56]Remember that taking *good*-predications to be even closer to ordinary conditionals than Sode (2019) assumes is motivated by the fact that other conditionals sometimes also feature the mood puzzle, i.e. an unshifted source of goodness regardless of subjunctive/indicative, see (sub-)sections 2.2, 3.2.2 and 4.4.

‘If we spend all of the money on a luxury buffet, there is no money left for the talks.’

The idea behind this example is to reproduce the contrast between the original puzzle, ‘SPENDING GOOD’/‘SPENDING NOT GOOD’, and it’s version with repeated context information, (97-b)/(97-c), for ordinary conditionals. The acceptability of (169-c) is predicted by a generalized SMB/LMB-account as well as a standard account of only one Modal Base, since the SMB would play the role of the ‘ordinary’ Modal Base, as for ‘SPENDING NOT GOOD’. (169-b), however should be accepted, as is ‘SPENDING GOOD’, if the parallel to *good*-predications were to hold, due to a LMB that is expected to be available, but it is only marginally acceptable in my intuition. (169-e) is just there for the contrast, it is the equivalent of (97-c) as an ordinary conditional and predicted to be accepted via an ‘ordinary’ Modal Base as well as a SMB. (169-d) finally is clearly out which is, again, predicted by both a LMB that contains accidentally as many worlds as a SMB, analogous to (97-b), and an ‘ordinary’ Modal Base that considers the whole context. While there seems to be a minor contrast between (169-b) and (169-d), it is not strong enough to support the claim that ordinary conditionals show the same puzzling behaviour as *good*-predications. The reason for this must remain completely open at this point.

So, while we have found one case - want-ascriptions in the case of conflicting wishes - of another modal phenomenon that seems to behave quite parallel to my puzzle, we now have a case of a modal structure - ordinary conditionals - that doesn’t seem to show this behaviour. What is more, there is a case of what looks a lot like my puzzle while the modal status is unclear:

(170) a. Guess what happened to Lea yesterday: She had planned to go to the climate demo. But on the way there she witnessed a bike accident and had to provide first aid. That was of course her top priority then, especially because no one else was there to do it. Unfortunately, she didn’t make it to the demo afterwards, but now she’s bragging about her civil courage...

b. Sie bedauert, dass sie die Demo verpasst hat, aber
she feels-sorry/regrets that she the demo missed has but
natürlich bedauert sie nicht, dass sie der Fahrradfahrerin
of-course feels-sorry she not that she the bike-driver
geholfen hat.
helped has
‘She feels sorry / regrets that she didn’t make it to the demo, but

of course she doesn't feel sorry for / regret having helped the cyclist.'

It seems to me that this behaviour might be specific for German *bedauern* which has a meaning between English *feel sorry for* and *regret*. The way the example is designed, everything that could happen is already fixed, and *bedauern* seems to express Lea's attitude towards it,[57] so this is not necessarily a case of modality at all, although it might be analyzed as one, contrasting what has happened with alternative possible worlds. After all, what is common between my puzzle on overall/partial goodness, puzzles on conflicting wishes and (170) above is that they all share a deontic Ordering Source (if (170) is analyzed as modal) and they all involve some kind of subject relativity, although I haven't given that a prominent role in my discussion of *good*-predications. Future investigation of puzzles of this kind should follow up on this connection.

[57] I thank Sarah Zobel for pointing out the special status of this puzzle to me. Another of her remarks that is relevant for further investigation of this case: Obviously, *bedauern* (feel sorry / regret) behaves unlike *bereuen* (regret) in this respect, as does *wollen* (want) as compared to *bevorzugen* (prefer).

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7 Kurzzusammenfassung (Deutsch)

Die Arbeit diskutiert den Fall einer deutschen *gut*-Prädikation (*Es ist/wäre gut, wenn...*), die im selben Szenario wie ihre Negation (*Es ist/wäre nicht gut, wenn...*) akzeptiert wird. Ich zeige, dass es sich dabei tatsächlich um distinkte 'Arten von Gutheit' ('overall' versus 'partial') handelt und nicht um ein bloßes Entscheidungsproblem. Eine klassische Modalsemantik im Sinn von Kratzer (1977, 1981, 1986, 1991, 2012b) und Sode (2019) sagt nur einen der beiden diskutierten Sätze als akzeptabel voraus. Eine Variation des Rätsels, bei dem Information aus dem Kontext in dem *wenn*-Satz vorkommt, liefert das ausschlaggebende Argument für einen Erklärungsansatz, der unterschiedliche Modale Basen (nicht etwa unterschiedliche Ordnungsquellen, Kratzer (1977, 1981, 1986, 1991, 2012b)) für die beiden diskutierten Sätze annimmt: Eine 'Small Modal Base', die durch Berücksichtigung aller Kontextinformationen stark restringiert ist; und eine 'Large Modal Base', die permissiver ist. Dass es keine 'Medium Modal Base' gibt, erklärt existierende Restriktionen. Dieser Ansatz leitet die Kompatibilität der beiden ursprünglichen Sätze her und vermag auch Variationen des Rätsels zu erklären. Ich lasse die konkrete Modellierung der beiden 'Größen' von Modalen Basen offen und weise auf Parallelen zu anderen Subjekt-relativen Ausdrücken hin.

8 Abstract (English)

A German *gut*(good)-predication and its negation are accepted in the same scenario. A Kratzer (1977, 1981, 1986, 1991, 2012b) and Sode (2019) style account to this puzzle predicts only the acceptability of one of the sentences. The puzzle disappears when a certain bit of information from the context is repeated in the *wenn*(if)-clause. I take this to be an argument that different Modal Bases (and not different Ordering Sources) are used - without any surface difference in sentence nor scenario. However, this is highly restricted: Only two 'sizes' of Modal Base are available, a 'Small Modal Base' that considers all restrictions from the context, and a 'Large Modal Base' that is less restricted and permits more possible worlds. This correctly predicts the original puzzle as well as a variation where some information from the context is also a part of the *wenn*(if)-clause. It seems that the two 'sizes' of Modal Bases are only available in certain subject dependent expressions.