Experiencers with (Un)willingness: A Raising Analysis of German 'Wollen'

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The paper contributes to the raising vs. control debate with respect to modals through (A) novel data; (B) the investigation of a domain in which it has proven particularly problematic: volitional modality. We analyze oblique arguments of experiencer verbs embedded under German *wollen* 'want' and propose that they support both generalized raising and the abandonment of the classical version of the Theta Criterion. Byproducts of the analysis include a syntactic account involved in a class of datives in the language together with the initial characterization of a related modal in German which is expressed through the same item as volition and which we term weak.

1 Introduction and overview of the article

The specialized goal of this article is the syntax of volitional *wollen*, 'want'. In this section, we first introduce some more general but necessary issues about modality and thematic roles.

There are numerous ways in which modal elements raise serious syntactic questions (cf. Roberts 1985, Cinque 1999, Reis 2001, among many others). There is, however, one apparently simple issue that is at the core of much of the syntactic debate on modality conducted over the past decades: the control-vs.-raising issue. Establishing whether modals are raising or control structures informs many other time-honored discussions. Not only does the question effect analyses that treat modals as full verbs; the answer to it is in fact even more urgent for analyses that operate with modals as functional heads. In this paper, we concentrate on the raising discussion on the basis of relevant German data. The overarching theme of the paper is determined by the generalized raising hypothesis (GRH hereafter), proposed in its clearest form by Wurmbrand (1999). The GRH does not conform to the received wisdom that modals are a dichotomous class with respect to control vs. raising: typically, epistemic modals are assumed to induce raising while root modals are assumed to appear in control configurations (cf. Ross 1969, von Stechow & Sternefeld 1988 for classical discussions pertinent to German). Instead, under the GRH, modals are raising elements through and through.

Our conceptual starting point is that the neat uniform thrust of the GRH approach still needs to face a few remaining questions. The main open issue in this connection is that volitional modals could so far not be proven to fit the GRH (nor to fully contradict it) and have remained problematic.¹ Empirically, we think more evidence is needed and we will argue that at least some instances of volitional modality, which have been overlooked so far, support the GRH. Moreover, volitionals of course do not fit the GRH under the standard understanding of the theoretical issues involved, e.g. theta roles. For a language like German, this is clearly not a satisfactory result since from a syntactic point of view the volitional modal *wollen*, 'want', patterns coherently just like the other modal verbs, thus inducing raising. The main impediment in the way of extending the GRH is theta theory in its connection with volitional modality: as the verb *wollen* assigns a theta role to the subject, the structure gives rise to a violation of the Theta Criterion (under the GRH). A further, perhaps more general, and common feature of the

problems arising are the interactions between modals and subjects and the restrictions coming along with it. We are not going to engage into this general debate. Solutions proposed to dilemmas of this kind pursue two types of strategies: (i) including extra machinery to handle the cases in which theta roles stand in the way with the introduction of adjunct or additional theta roles (Zubizarreta 1982, Vikner 1988) or (ii) denying that the apparent interaction has anything to do with theta roles (Wurmbrand 1999). However, we will suggest a different route than the standard approaches to GRH while developing our case study on volitional modality. Instead of introducing additional assumptions in order to comply with the Theta Criterion, we present evidence that strengthens the indication that it is rather the Theta Criterion that needs to be abandoned as it is (Hornstein 2003 and references; cf. also Bošković 1994 on related discussion). To make our point, we will explore two less well-trodden areas in the domain of both modality and argument structure from German.

We will chiefly concentrate on volitional instances of *wollen*, 'want'. But at the same time, modals are notoriously context-dependent (Kratzer 1991). Given such high context-dependency, advantage can be gained, and in the present case-study particularly so, from discussing the syntactic effects of further interpretations of the modal in point and comparing them to the syntax of the volitional reading. In this connection, some of the readings that become available are seemingly spurious; some others though, we will argue, are systematic in a number of ways, which we will characterize. For a very initial illustration, let's note that in a language like English, in which *want* does clearly not share the classical syntactic properties of the modals, spurious *want* can appear, e.g., on an interpretation which is at least close to an epistemic one; cf. (1). However, when we encounter more than once-uses of certain readings, we will argue that at least part of what is involved has to do with the grammar (of German).

- (1) a. Customer: Do you have coolers?
 - b. Assistant: Coolers? They wanna be on one of the top shelves somewhere. They only arrived this morning. (Californian female shop assistant, native speaker, cited from Krug, 2000: 150)

Second, we will concentrate on oblique arguments, marked as such morphologically by the requirements of experiencer predicates typically taking the dative. English, for instance, does not allow raising of an oblique argument over the volitional verb to result in grammatical structures, as shown in (2) - let alone marking that argument with volition, i.e. theta-marking it a second time. Since we will argue that a subclass of German obliques does precisely this, we will also give a characterization of the conditions that we take to crucially contribute to such behavior (as necessary conditions).

(2) a. *Him wanted to [she give the keys].
b. *To her wanted to [Oscar give the keys]

The article is structured as follows. In section 2, we give an overview of the relevant syntactic complementation patterns and the readings *wollen* gives rise to in each of them to then outline the possibilities under which the data could be analyzed on traditional assumptions and argue that they are not adequate. Section 3 gives a straightforward raising analysis of the oblique experiencer construction and analyzes the main syntactic conditions involved. In section 4, we discuss further theoretical aspects of the Theta -Criterion; section 5 concludes the paper.

2 Modal wollen 'want' with propositional complements

In this section, we illustrate the relevant data stock: we show the main configurations and interpretations the volitional verb *wollen* 'want' can participate in and introduce some of the data on its interaction with various types of raised arguments. At the end of this section and preparing the ground for the analysis given in the next one, we give some arguments why we think the volitional modal in German does not fit the analyses proposed for partially similar cases in other languages.

2.1 Nominative subjects with wollen

The most commonly encountered configuration for *wollen* is the one with a volitional interpretation on a nominative argument. Of course, in such cases, the embedded proposition under the volitional verb can be constructed around the skeleton of an embedded experiencer verb, cf. (3b), just like of any other predicate; cf. (3a). We introduce this basic case as a counterfoil in particular to make clear some of the contrasts arising later on. (We occasionally use colloquial forms of proper names with determiners to make case differences conspicuous.)

(3)	a.	Der Hans will Kuchen essen.	("regular" volitional NOM)
		the.NOM Hans wants cake eat	
		'Hans wants to eat some cake.'	
	b.	Das Mädchen will dem Großvater nicht gefaller	1.
		the.NOM girl wants the.DAT grandfather not please	2

The following examples, still with nominative subjects, show some further interesting readings of the same modal. We give two of them, in (4) and (5), such that they can illustrate two different things on traditional assumptions about theta roles and modality.

'The girl doesn't want to please the grandfather.'

(4) Ich will mal vorangehen.I want PRT go ahead.'I'm going ahead.'

(aspectual; cf. Wunderlich 1981)²

(5) Maria will die Arbeit selber geschrieben haben. Maria wants the work herself written have 'Maria claims that she has written the work herself.'
(quotative; cf. Palmer 1986 among others)

The first of the two cases, namely (4), is functionally arguably an aspectual marker and might hence be said to trivially fit the GRH. This is not the case, however, for the second one, (5). Though functionally an evidentiality marker is contained in (5) - i.e. an element that in some languages involves a structurally high position distant from the subject position(s) according to Cinque (1999) – the subject of (5) cannot be claimed <u>not</u> to interact with the modal *wollen*. The reason is that for a proper interpretation, it is essential that the claim be made by Mary in (5), and

not by someone else (we will return to some further effects between quotative *wollen* and the argument raised to it). Therefore, the reading in (5) poses a problem for standard assumptions about theta-marking, which we will argue to be similar in some syntactic respects to volitional *wollen*. Finally, further possibilities and interpretations with nominative arguments arise both in current and earlier German. For our purposes, it is time to turn to our main concern, oblique arguments – *inter alia*, in order to be able to compare their syntactic effects (in particular with regard to interaction with the modal) with the behavior of the nominatives.

2.2 Obliques (embedded experiencers) in configurations with wollen

Concentrating on dative arguments originating from experiencer predicates embedded under a volitional modal, we note the main cases exemplified in (6)-(8):

- (6) *Ihm will einfach nichts gelingen.*him.DAT wants simply nothing succeed
 'He just doesn't succeed in anything (although he tries ...).' (weak reading for the oblique)
- (7) a. Dem Großvater will die Suppe nicht schmecken. the.DAT grandfather wants the soup.NOM not like The grandfather doesn't like the soup/ doesn't want to like the soup.' (weak/ volitional reading for the oblique)
 - b. Dem Großvater will das Mädchen nicht gefallen. the.DAT grandfather wants the girl.NOM not please 'The grandfather doesn't like/ want to like the girl.' (preferred reading) (also: 'The girl doesn't want to like the grandfather.') (same as previous, but with sentient co-occurring nominative argument)
- (8) Dem Peter will das Theaterstück gefallen haben. the.DAT Peter wants the theater play liked have 'Peter claims to have liked the play.' (quotative oblique)

Sentence (6) has an apparently idiomatic reading roughly to be paraphrased along the lines given in the translation; we will have a few more things to say about its interpretation below. For expository purposes and in particular to distinguish it from genuine volitional interpretations, we call this type of *wollen* weak. In terms of argument structure, the dative argument of the embedded verb *gelingen* 'succeed' in (6) gets into a head-spec relationship with weak *wollen*. A similar meaning also arises in sentences such as (7a). However, in (7a) a volitional reading is also available for many speakers (typically with stress on *wollen*; see below). But unlike in the previous subsection, the (un)willingness or volition is this time interestingly interpreted on the part of the dative argument, i.e. the argument that ends up with the volitional element in a Spechead relationship. Further, with two animate arguments, as in (7b), volition can interestingly be interpreted on either argument. Finally, in (8), we note a partially similar shift in the interpretation of the quotative: the individual making the claim is the one that corresponds to the syntactically displaced dative argument.

2.3 Volitional vs. weak readings

While the quotative reading seems to be quite stable for virtually all speakers, the tempoaspectual interpretations, by contrast, are rather spurious or might be claimed to be derivatives of the modal meaning in German and not the actual lexical entry for the semantics of *wollen*. In this subsection, we concentrate on volitional and weak readings and offer a few more heuristic tests that distinguish between the volitional and what we have called the weak reading for the speakers who allow for both readings in the relevant configurations. We observe them in four main domains: (i) stress; (ii) reduplication; (iii) negation; (iv) conversational backgrounds. Let's consider the data in (9)-(13) in turn.

- (9) Dem Präsidenten WOLLTE aber das Argument gar nicht einleuchten -the.DAT president.DAT wanted but the.NOM argument.NOM at all not make-sense (er hatte den Beschluss im Vorfeld ja schon gefasst.)
 'The president, however, did not even want to realize the argument at all --(he had already made the decision before.)'
- (10) *Dem Architekten <u>wollte</u> und <u>wollte</u> nichts einfallen.* the.DAT architect.DAT wanted and wanted nothing.NOM occur 'There was just nothing that would occur to the architect.'
- (11) a. In einer schlaflosen Nacht ging Francesco Borromini in seinem Schlafgemach auf und ab. Er grübelte über die baulichen Maßnahmen der Fassade von "San Carlo alle Quattro Fontane." Irgendetwas fehlte noch zur gelungenen Vollendung des Kunstwerkes. Aber ihm wollte und wollte nichts einfallen. Seine Füße waren schon ganz kalt vom Herumlaufen auf dem Steinfußboden. (www.museumonline.at)
 - b. During a sleepless night, Francesco Borromini was walking up and down in his bed-chamber. He was pondering on the construction measures for the façade of San Carlo alle Quatro Fontane. Something was still missing to make it a fully successful accomplishment. But there was just nothing that would occur to him. His feet were already cold from walking around on the stone floor.
- (12) Dem Franz wollte das Rezept für die Schwarzwäldertorte nicht gelingen. -- #?Er hat es nicht einmal versucht richtig umzusetzen.
 'Franz was not successful with the recipe for the Schwarzwälder pie. He did not even try to apply it correctly.'
- (13) Der Großmutter will aber Annas neuer Freund gar nicht gefallen. -- Sie hat sich nicht einmal die Mühe gemacht, sich seinen Namen zu merken.
 'Grandmother does not want to like Anna's new friend. She did not even make an effort to remember his name.'

First, for the volitional reading to obtain we note that emphatic stress (on the modal or an associated item that carries sentential polarity, e.g. particles such as *sehr wohl*, 'indeed') is a necessary condition for all the cases we have checked so far.³ Second, only the weak reading

allows reduplication of the modal, as shown in (10), where the duplicated form blocks a volitional reading.⁴ A third characteristic of the weak reading is that it requires negation (see section 3.4 below). Finally, the semantic and pragmatics play a major role in determining the meaning. Sentence (11) is, for instance, an attested context setter and the (non)cancellations shown in (12)-(13) illustrate a distinction in the meaning of the two modals, namely the fact that most typically a process of "trying in vain" is implied on the weak reading. While a deeper investigation of the semantic-pragmatic component would take us too far afield, we note its crucial role, mainly as a naturally appearing effect of the ways modality can be realized in language more generally (cf. Kratzer 1991 and much related work). Next, we offer a few syntactic first guesses one could have relating to the constructions at hand, which, however, we will not see as verified.

2.4 What the wollen-constructions are not

In this section, we state the main differences from the construction at hand and a few resembling constructions. To start, while we think a comparison with free datives is potentially interesting, the oblique argument in conjunction with *wollen* is not a free dative: it stems from the lower predicate, whose morphological marking it bears. Further, from an initial cross-linguistic consideration, there are two main parallels that one could be tempted to draw in the present context from the behavior of originally volitional modals in other languages, including Germanic, and the syntax of A-moved oblique arguments, respectively. First, former volitional modals are well-known to develop into full-fledged auxiliaries (with an entire series of accompanying characteristics, including the loss of non-finite forms etc.), e.g., in languages such as English or Romanian; cf. (14). Second, oblique arguments have been shown by copious research to be able to behave syntactically as subjects, notoriously in Icelandic, cf. (15).

- (14) a. Sue will start working on the project next month. (ModE future < OE vol)
 b. De la anul care vine voi schia. (Romanian future < Lat. vol)
 from year which comes will.1.SG ski
 'From next year on, I'll ski.'
- (15) *Henni likuðu hestarnir*. (Icelandic, Sigurðsson 2003: 7d) her.DAT liked horses.the.NOM 'She liked the horses.'

The immediate idea to check is whether the German data at hand are not simply a combination of the two attested phenomena, auxiliarization plus the rise of quirky subjects. This scenario does, however, not go through as such. So, why is German *wollen* not a case of grammaticalized auxiliary, or T-element, with an oblique subject occupying the associated specifier position? While any discussion on subjects and functional heads is prone to require more space than we have here, let us mention the main reasons why this combined analysis is untenable for German, First, German *wollen* is not an auxiliary or T-element. (i) *Wollen* lacks a specialized temporal semantics, as the future markers *will* or *voi* in (14). While temporal and aspectual implicatures can certainly show up in conjunction with volition, there is no such semantic entry in ModHG, e.g. comparable to that of the future marker mentioned. (ii) While the English form only exists finitely (in Standard Modern English), there is no similar restriction against non-finite forms in

the cases of *wollen* that end up with an oblique argument. (iii) The evidence for Infl-like elements and also the Spec-Infl position turns out to be problematic or at least much weaker in general in German (Haider 1997, Reis 1982, Sternefeld 2006). (iv) Even if one were able to explain away the curious behavior of the German Infl-domain (and say the language turned out to have a well-behaved system), *wollen* could clearly not be a first-merge candidate for such an auxiliary position – unlike the English modals, it can, for instance, surface as a complement of the perfect. (v) There is prototypical⁵ thematic interaction between the (dative or nominative) argument and the volitional verb.

Furthermore, the dative in the structure is not a dative subject as for example in Icelandic. (i) Icelandic verbs can, and sometimes must, agree with the dative argument in two-argument configurations. The German *wollen* construction, however, invariably agrees with the nominative; contrast (16a) with (16b).

(16) a.	*Honum mund uð alltaf líka þið .	(Sigurðsson 2003: 31b)
	him.DAT would.2PL always like you	I.NOM.PL
	'He would always like you'	
b.	Ihr woll en keine Blume n gefal	len./ Ihr gefall en keine Blume n .
	her.DAT want.PL no flowers.NOM.	PL like/ her.DAT like no flowers.NOM .PL
	'She doesn't (want to) like flowers	(at all).' /'She doesn't like flowers.'

(ii), quirky subjects do not have the syntactic-distributional properties of "oblique + *wollen*" (about which we will say more momentarily); conversely, Icelandic – though otherwise productive in raising datives – does not allow oblique raising over volitional *vilja*, 'want', according to our informants.

All in all, we are led to think that the data on *wollen* that we introduced above, on the one hand, and the tense and quirky-subject phenomena, on the other, are distinct – primarily as far as thematic roles, agreement properties and auxiliary status are concerned. To the basic A-movement mechanism, that they share though, i.e. raising, we turn next.

3. A raising analysis

In this section, we propose a raising syntax that explains the cases of *wollen* at hand. Furthermore, we consider the main grammatical factors that are necessary for the construction in German.

3.1 The reading correlations and the raising proposal

We saw in sections 2.1 and 2.2 above that both the nominative and the dative of an embedded experiencer predicate can be eligible for volition marking. Now we consider sentences with two rational entities as arguments more closely. Naturally in such situations, given our previous observation, either of the arguments will also be expected to potentially carry volition. This is indeed generally borne out. What is more though: confronted with sentences as in the ones given in (17) below, most speakers interpret the raised argument as having a relationship with *wollen* as the salient reading. That is to say, in (17a), the preferred reading is the one in which the dative argument, 'the grandfather' seems to act as a "subject", while in (17b) it is the nominative, 'the girl' that is marked by the modal. (17c) and (17d) replicate the results for embedded contexts.

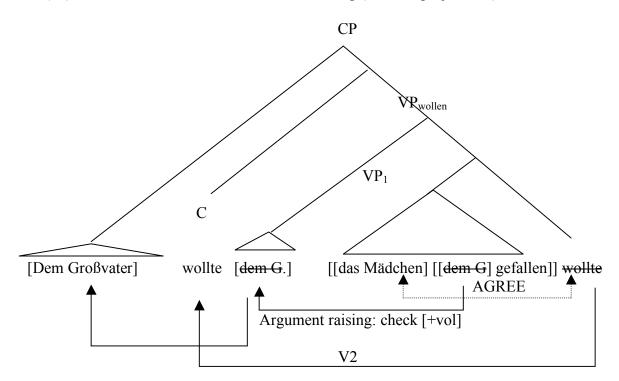
- (17) a. Dem Großvater will das M\u00e4dchen nicht gefallen.
 the.DAT grandfather wants the.NOM girl not please
 Preferred reading (PR): 'The grandfather does not want to like the girl.'
 - b. *Das Mädchen will dem Großvater nicht gefallen.* the.NOM girl wants the.DAT grandfather not please PR: **'The girl** doesn't want to please the grandfather.'
 - c. ... weil der Großmutter der Junge nicht gefallen will. ...because the.DAT grandmother the.NOM boy not please wants
 - d. ... *weil der Junge der Großmutter nicht gefallen will.* ... because the.NOM boy the.DAT grandmother not please wants

Occurrence in a Spec-head relationship on another reading in which the modal has a semantic relationship with the dative has some similar effects. The quotative, cf. (18) below, in general shows the same interpretation possibilities with respect to preferred readings depending on the choice of argument.⁶

(18)	a.	Dem Peter will Maria gefallen haben.
		the.DAT Peter wants Maria pleased have
		PR: 'Peter claims to have liked Maria.'
	b.	Maria will dem Peter gefallen haben.
		Maria wants the.DAT Peter pleased have
		PR: 'Maria claims to have been liked by Peter.'
	c.	weil dem Peter Maria gefallen haben will.
		because the.DAT Peter the.NOM Maria pleased have wants
	d.	weil die Maria dem Peter gefallen haben will.
		because the NOM Maria the DAT Peter pleased have wants

Starting from the indication seen so far, we propose the following derivation to account for the data; consider (19).

(19) Basic derivation of volition theta-checking (relevant projections)



On a reading on which the oblique is interpreted as volitional, as in (19), the projection headed by *wollen* will have the dative argument going through its specifier position. We propose that it checks a volition feature [+vol] right there. The analysis in (19) makes use of the simplest assumptions that we think are a matter of consensus for German. Further functional projections might be interspersed into the structure if there is evidence for them, but they would not alter the line of argumentation given here.⁷

3.2 Further evidence for the relationship of wollen and the oblique

We have claimed that on the volitional reading the argument marked as such moves out of its low VP and checks its theta role in the specifier position of (volitional) *wollen* (that is, the high VP). There are two additional indications towards this conclusion. First, consider configurations with only one animate argument. The dative cannot be topicalized together with the lower predicate as in (20). There is no interpretation that could be assigned to such structures.

(20)	a.	*[dem Grossvater schmecken] wollte die Suppe nicht.
		the.DAT grandfather like, wanted the.NOM soup not
	b.	*[der Frau gefallen] wollte das Kleid nicht.
		the.DAT woman please, wanted the.NOM dress not

The dative in examples such as (20) is encapsulated in the lower VP and is fronted, but notably only wholesale in the particular phrase-structural package. That means that such datives cannot have had a chance to evade the lower VP and check volition in the specifier of *wollen*.

Second, it is not the case that experiencer verbs categorically rule out the evacuation of the lower predicate together with the oblique, as (21) below shows (see Lenerz 1977).

(21) [Dem Großvater gefallen] wollte ja unser Mädchen nicht. the.DAT grandfather please wants prt our girl.NOM not 'Our girl didn't want to please the grandfather.'
*The grandfather did not want to like our girl.

What is more important though is that in such configurations, which contain two animate arguments, the reading in which the argument topicalized together with the lower experiencer predicate would be interpreted as volitional is entirely ruled out for all speakers.

All in all, we have given a clear and, we hope, with the usual amount of abstraction, accurate implementation of the derivation involved, i.e. ending with V2 as head-movement to C and the raised argument landing ultimately in Spec, CP.⁸

3.3 Why theta roles?

Having presented our basic raising analysis, we now turn to the second major ingredient: the volitional theta role involved with the modal *wollen*. One reason why we think of volition in terms of theta roles comes from studies on thematic properties of verbs. Volition is assumed to be a core concept in theta theory in Dowty's widely acknowledged work. It is independent from action, as volition can target the absence of action (Dowty 1991). With *wollen* being a modal, this claim is related to the discussion whether (deontic) modals in general assign a theta role to their subject position, an issue that has been subject to major discussions. Wurmbrand (2004), for example, argues that all modals are raising verbs and they do not assign theta roles (neither in their deontic nor in their epistemic forms). Major evidence for this position comes from traditional tests related to selectional restrictions on the subject position. As Wurmbrand argues, exactly these restrictions are not observable with modals in general: they co-occur with weather verbs and allow for inanimate subjects (cf. Wurmbrand 2004:996):⁹

(22) a. Es muß morgen schneien. It must tomorrow snow 'It must snow tomorrow [otherwise the race will have to be cancelled].'
b. Der Kuchen muß gegessen werden. The cake must eaten AUXPASS 'The cake must be eaten.'

However, these criteria do not hold for *wollen* in the same way. *Wollen* can occur with weather verbs, but only under negation and with a restricted interpretation.

(23) Es will heute nicht regnen.it wants today not rain'Although it is expected it doesn't rain today' (approximate reading)

Furthermore, in cases such as (24), in which *wollen* occurs with an inanimate subject the interpretation is different from the interpretation with other modals above (see (22)). Two things

can happen: first, if volition is involved, it does not mean that someone wants the cake to be eaten, but rather that the cake has some desire to be eaten.

(24) ?Der Kuchen will gegessen werden.the cake wants eaten to be'?*Someone wants to eat the cake.'

Second, when such examples occur in appropriate contexts, another interpretive option involves a change in the meaning of the modal, quite parallel to deontic *sollen*. The following example illustrates these two options (cf. also *fordern* 'require' in the preceding conjunct in (26), which simply gives a naturally occurring context).

- (25) Skizzen, die erarbeitet werden wollen sketches, that worked-out be want 'Sketches that need to be worked out.'
- (26) a. Kleine Schwarzweißbildchen fordern genaues Hinschauen; mit spitzer Feder gezeichnete Routenpläne sind Skizzen, die erarbeitet werden wollen, und auch die acht Kapitelüberschriften werben nicht mit hochtrabenden Phrasen [...]. ("Reiselesebuch der besonderen Art", Frankfurter Allgemeine, Jul.06, 2006, p. R8)
 b. Small black-and-white pictures require close attention; plans for routes drawn with sharp pen make for outlines that need to be worked out and the eight chapter headings do not advertise with overblown phrases either. ("Travel reading book of a special kind".)

Furthermore, even though in general modals can occur with impersonal passives, *wollen* is ungrammatical in this position (cf. Erb 2001).

(27) Es *will/muss hier geschuftet werden. it wants/ must here toiled be 'Here, one wants to/ is obliged to toil.' (Erb 2001:87)

Finally, another test for thematicity are subject idioms. And again, *wollen* cannot occur with subject idioms of this type.

(28) ?*Das will dem Fass den Boden ausschlagen. that wants the barrel the floor knock out 'That wants to take the cake.'

All the data above are strong indications that *wollen* indeed assigns a theta role to its subject position (in general), further supporting our analysis of the special cases that we discuss above.

3.4 Negation

In this section, we discuss the role of negation and investigate to what extent a suggestion originally made by Bech (1949) can account for the data we are concerned with. The starting point is that while volition in general can, of course, be negated or used affirmatively, weak readings of *wollen* only appear in conjunction with negation. We illustrate this contrast for volitional reading of raised obliques. Contrast (29), on a volitional reading, with weak (30). In particular oblique-raising volitional readings can also appear in positive polarity contexts.

(29)	a.	A: Dem Hans WILL das aber gar nicht gefallen. the.DAT Hans wants that but at all not like 'Hans doesn't want to like that at all.'
	b.	B: Ach was, ihm will das sehr wohl gefallen.oh what him wants that PRT. like'Tut, of course he wants to like that.'
(30)	a.	<i>A: Dem Hans will das aber gar nicht gelingen.</i> the.DAT Hans wants that but at all not succeed 'Hans doesn't succeed in that at all.'
	b.	<i>B:</i> * <i>Ach was, ihm will das sehr wohl gelingen.</i> oh what him wants that PRT. like 'Tut, of course he succeeds in that.'

Given the tight syntax of the modals ("coherence"; see section 3.5 below), negation can take either narrow or wide scope. Ehrich (2001) observes the possibility of two scope positions for negation, cf. (31) and notes that "negated *wollen* ('will') and *sollen* ('shall') convey equivalent meanings, no matter whether the negation is assigned wide or narrow scope" (Ehrich 2001:149).

(31) Nicht anrufen soll man auch nicht. not call up should one too not
'One shouldn't not call either.' (Ehrich 2001:162)

Clearly, the more general question is what contributes to possible scope variability. For one thing, certain conversational backgrounds will restrict scope options. Following Bech (1949), Ehrich (2001) argues that a difference between what is called a passive vs. an active variant of *wollen* (no direct connection to voice alternation is meant by the terms) is at the heart of the scope options of the two modals. Working definitions adapted from Ehrich's article are given in (32) and (33).

(32) a.	active: directed towards materializing the predication of the infinitive
	\rightarrow necessity modal N p (represented by capitals)
b.	Jonathan WILL Medizin studieren, um jeden Preis.
	J. wants medicine study by any price
	'Jonathan wants to study medicine by all means.'

(33) a. *passive*: <u>not</u> directed towards the <u>non</u>realization of the embedded predication:

- \rightarrow not N (not p) (represented as underlined)
- b. J. will die Küche nun doch aufräumen. Ich habe ihn breitschlagen können.
 - J. wants the kitchen now PRT tidy-up I have him persuade canPART
 - 'J. wants to tidy up the kitchen (after all). I was able to persuade him.'

Next, we apply the passive/active distinction to the cases of oblique-raising. Under the hypothesis that oblique-raising cases of *wollen* follow the active/passive distinction, clearly the candidate for the active reading is the volitional one, cf. (34).

(34) Dem Groβvater WILL die Suppe (nicht) schmecken. the.DAT grandfather wants the.NOM soup not like 'Grandfather does not WANT to like the soup.'

On the other hand, weak *wollen* is a much better candidate for the passive use, i.e. *wollen*. We note that reduplication for passive *wollen* is fine, i.e. the same test that we saw at work with weak readings of oblique-raised instances of the modal; cf. (35).

(35) Peter wollte und wollte sein Zimmer nicht aufräumen.Peter wanted and wanted his room not tidy up 'Peter didn't want to tidy up his room.'

Further, weak oblique-raising wollen invariably requires negation, cf. (36) and (37):

- (36) *Dem Großvater <u>will</u> das nicht gelingen.* the.DAT grandfather wants that not succeed 'Grandfather does not succeed in that.'
- (37) **Dem Großvater <u>will</u> das gelingen.* the.DAT grandfather wants that not succeed 'Grandfather wants to succeed in that.'

An interesting prediction can be made by assuming that weak *wollen* fits the idea of passive modality. Let us see the scope possibilities for a sentence such as (38).

(38) Dem Peter wollte das neue Rezept nicht gelingen.the.DAT Peter wanted the new recipe not succeed'For Peter, the recipe just wouldn't work.' (non-conditional would)

First, with Bech's *negatio recta*, i.e. by applying external negation on top of passive *wollen*, we get, according to the definitions, '**not** (not N (not p))', which is 'N (not p)'. This amounts to "in all relevant worlds w', P. doesn't succeed in doing p." Next, with *negatio obliqua*, i.e. by applying internal negation, we obtain 'not N (**not** (not p))', which is 'not N p', i.e. "not in all relevant worlds w', P. succeeds in doing p." But the latter is not what the sentence means. Thus the only available option for this kind of modal is the one under the scope of (external) negation. Therefore, by capitalizing on the Bech/Ehrich suggestion, it seems that the assumption of an informally imported "passive" semantics can make a good prediction about the requirement for negation.

3.5 The coherence condition

The possibility of moving an embedded argument to acquire an additional theta role as suggested in the analysis above is not entirely unrestricted. In contrast to *wollen* 'want', verbs like *beabsichtigen* 'intend' do not allow for a reading with the oblique being assigned the [+vol] theta role, even though the meaning and argument structure of the two verbs is very similar.

(39) Dem Großvater beabsichtigt das Mädchen (nicht) zu gefallen. the.DAT grandfather intends the.NOM girl (not) to please '*The grandfather has not intention of liking the girl/ doesn't like the girl.'

The relevant difference between the two verbs is *coherence* (or *restructuring*).¹⁰ Whereas *wollen* 'want' is an obligatorily coherent verb, *beabsichtigen* 'intend' is an example of a (optionally)¹¹ non-coherent verb. The following tests for coherence/non-coherence show the relevant distinction between the two verbs.

The first test is the extraposition test: non-coherent verbs allow for extraposition of the embedded verb and its arguments, showing that the embedded verb and its argument(s) are independent constituents. Coherent verbs do not allow for this type of extraposition. As can be seen in the following examples, *beabsichtigen* allows for extraposition to the right whereas *wollen* does not, neither when embedding general transitive verbs nor when embedding the class of DAT-NOM verbs relevant here.

(40)	a.	dass Johann beabsichtigt Gemüse zu kaufen.		
		that Johann intends vegetables to buy		
		that Johan intends to buy vegetables.'		
	b.	dass Johann beabsichtigt dem schönsten Mädchen zu gefallen.		
		that Johann intends the most-beautiful girl to please		
		'that Johann intends to please the most beautiful girl.'		
(41)	a.	* <i>dass der Hans nicht will Gemüse kaufen</i> . that the.NOM Hans not wants vegetables buy		
		'that Hans doesn't want to buy vegetables.'		
	b.	*dass der Haushalt nicht will, dem Johann gelingen.		
		that the.NOM household not wants the.DAT Johann succeed		
		'that Johann doesn't want to succeed in doing the household.'		
	c.	*dass dem Johann nicht will, der Haushalt gelingen.		
		that the.DAT Johann not wants the.NOM household succeed		
"that Johann doesn't want to succeed in doing the house				

The second test that shows the difference between the coherent verb *wollen* and the non-coherent verb *beabsichtigen* is pied-piping in relative clause formation. When the argument of a verb embedded under a non-coherent verb is relativized, it can pied-pipe its verb. Verbs that construct coherently do not allow for this. Applied to *wollen* and *beabsichtigen*, we see the same difference as above.

(42) a.	<i>die Aufgabe, [die zu lösen] Johannes nicht beabsichtigt.</i> <i>the task which.ACC to solve Johannes not intends</i> 'the task that Johannes does not intend to solve.'
b.	das Mädchen, [dem zu gefallen] Johannes nicht beabsichtigt. the girl, that.DAT to please Johannes not intends 'the girl, which Johannes does not intend to appeal to.'
(43) a.	* <i>das Gemüse, das kaufen der Hans nicht wollte.</i> the vegetables, that buy the.NOM Hans not wanted 'the vegetables that Hans didn't want to buy.'
b.	* <i>die Suppe, [die schmecken] dem Grossvater nicht will.</i> the soup, which.NOM taste] the.DAT grandfather not wants 'the soup that the grandfather doesn't want to like.'
c.	* <i>die Mädchen, die gefallen] dem Grossvater nicht wollen.</i> the girls who.NOM please] the.DAT grandfather not want 'the girls who the grandfather doesn't want to like.'

The above tests show that the embedded verb and its arguments are to some degree independent from matrix verbs that construe non-coherently. A test that works in the opposite direction is the verb cluster fronting test: a typical feature of the class of coherent verbs is that they can form a constituent with the embedding verb to the exclusion of its arguments. This verbal cluster can be fronted to the first position (under the independent IPP (*infinitivus pro participio*) effect, in which an infinitive is used instead of the morphologically expected participles). Non-coherent verbs like *beabsichtigen*, do not create such a close relationship with the embedded verb, cf. (44) and (45).¹²

(44)	a.	[Kaufen wollen] hat der Hans das Auto schon lange. [buy.INF want.INF] has the Hans the car already long
		'Hans wanted to buy the car for a long time.'
	b.	[Schmecken wollen] hat dem Hans die Suppe nicht.
		[taste.INF want.INF] has the Hans the soup not
		'Hans didn't want to like the soup.'
(45)	a.	*[Zu besuchen beabsichtigt] hat Hans seine Schwester noch nie.
		[to visit. INF intend.PRTP has Hans his sister yet never
		'So far, Hans has never intended to visit his sister.'
	b.	*[Zu gefallen beabsichtigt] hat Hans seiner Schwerster noch nie.
		[to please.INF intend. PRTP] has Hans his sister yet never
		'Hans has never intended to visit his sister.'

From these tests, we conclude that *wollen* construes as an obligatorily coherent verb (in contrast to *beabsichtigen* 'intend').¹³ That coherence is indeed a relevant precondition for the reading observed is further corroborated by cross-linguistic considerations. First of all, let us look at Chilean Spanish for which the same type of reading has been observed (cf. González 1988, cited after Bošković 1994:268, and Hornstein 2003:24):

(46)	a.	Marta le quiere gustar a Juan.
		Marta CL wants please to Juan
		'Marta wants for Juan to like her.'
	h	A huan la anjere oustar Marta

b. *A Juan le quiere gustar Marta*. To Juan CL wants please Marta 'Juan wants that Juan likes Marta.'

The examples and glosses in (46) not only show the same type of observation with *querer* 'want' in Chilean Spanish, but it also shows that *querer* is a restructuring verb: the clitic *le* climbs from the embedded clause to the matrix clause, a movement that is only available with restructuring predicates (cf. Rizzi 1978).

Data from Romanian further support this claim from the opposite angle: Romanian *vrea* 'want' does not allow the reading discussed here as seen in (47) even though it has the relevant kind of OBL-NOM verbs as German has, as seen in (48).

(47)	Lui Ion vrea [să-i	placă	Maria].
	to Ion wants [MOD-OBL.CL3SG	like	Maria
	'*Ion wants to like Maria.' (non-	availab	le reading)

(48) *Lui Ion îi place Maria.* to Ion OBL.CL3SG likes Maria 'Ion likes Maria.'

The non-availability of the relevant reading is correlated with the non-restructuring properties of *vrea* 'want'. (49) shows that clitic climbing is not possible.

(49)	a.	Maria vrea 🏼 [[să- l	vadă	pe Marcel].
		Maria wants [F	PRT-CL.3SG.M	ASC see.3SG.SUBJ	PE Marcel]
		'Maria wants t	to see Marcel		
	b.	*Maria îl	vrea	[să vadă	pe Marcel].
		Maria CL.3SG.1	MASC wants	PRT see.3SG.SUBJ	PE Marcel

These data further support the conclusion that coherence is a necessary condition on the availability of raising the oblique. However, it is not a sufficient condition as further crosslinguistic data show. In Dutch for example, the raising of the oblique across the volitional modal *willen* 'want' to receive the [+vol] theta role is not possible.

(50) *Mij wil hij niet bevallen.* me.OBJ wants he.NOM not please 'He doesn't want to please me.' '*I don't want that he pleases me.'

The relevant reading is not available even though *willen* 'want' behaves as a coherent, restructuring verb as can be seen from the corresponding tests in (51) to (53).¹⁴

(51)		* <i>dat het huishouden niet wil Peter lukken.</i> that the household not want Peter succeed ' that Peter does not succeed in doing the household.'
	b.	 * dat mij niet wil het huishouden lukken. that me not want the household succeed 'that Peter does not succeed in doing the household.'
	c.	* <i>dat Hans niet wil groenten eten.</i> that Hans not want vegetables eat ' that Hans doesn't want to eat vegetables.'
(52)	a.	* <i>de meisjes, die bevallen grootvader niet wilden.</i> the girls, which please grandfather not want.PL 'the girls, which don't want to please the grandfather.'
	b.	*de groenten, die kopen Hans niet wilde. the vegetables, which buy Hans not wanted 'the vegetables that Hans didn't want to buy.'
(53)	a.	[Willen bevallen] heeft hem het meisje niet. want please has him the girl not 'The girl does not want to please him.'
	b.	[Willen kopen] heeft hij de auto al lang. want buy has he the car already long 'He always wanted to buy the car.'

Thus, obligatory coherence/restructuring is a necessary but not a sufficient condition for the availability of the oblique raising to the subject position of the modal to pick up the [+vol] theta role.¹⁵ As obligatory coherence is related to raising (though indirectly), the data above suggests once more that *wollen* is a raising verb. Support for this claim comes from the work of Geilfuß (1992) who has argued that *wollen* is not a bona-fide control verb contra to what has been traditionally assumed.

The main evidence for his position comes from *was-für-* and PP-extraction. The reasoning is that in a configuration with one DP and an embedded passive/participle configuration, the control analysis takes the DP as a genuine subject, whereas in a raising analysis the DP is a derived subject. As extraction from genuine but not derived subjects is barred, control verbs should block extraction from this NP. This prediction is born out with bona-fide control verbs both in *was-für-* and PP extraction. *Wollen*, however, allows for this type of extraction, a fact that shows that the subject position with *wollen* is a derived subject position.

- (54) a. **Es ist erstaunlich, was ja doch t für Leute ungenannt zu bleiben verlangen.* it is amazing WAS indeed t FÜR people unnamed to remain require 'It is amazing what kind of people require to remain unnamed.'
 - b. Es ist erstaunlich, was ja doch *t* für Leute ungenannt bleiben wollen. it is amazing WAS indeed t FÜR people unnamed remain want 'It is amazing what kind of people want to remain unnamed.'

- (55) a. *Es ist erstaunlich, von welchem Pamphlet der Verfasser t nicht genannt zu t not named to it is amazing of which pamphlet the author werden verlangt. AUX.PASS requires 'It is amazing of which pamphlet the author requires that he is not named.' Es ist erstaunlich, von welchem Pamphlet der Verfasser t nicht genannt b. it is amazing of which pamphlet the author t not named
 - it is amazing of which pamphlet the author t not named werden will
 AUX.PASS wants
 'It is amazing of which pamphlet the author wants that he is not named.'

Taking together this evidence against a control and for a raising analysis of *wollen* 'want', we conclude that *wollen* is indeed a raising verb, further supporting the analysis given in (19) above.

3.6 The link of the epistemic restriction: A case of grammaticalization?

The volitional modal in German seems to have grammaticalized into an item with the peculiar raising properties we have seen in particular in conjunction with oblique arguments. The (side)issue we explore in this section is whether there is any distributional corroboration that parallels other cases of grammaticalization that are known to have occurred within the class of German modals. Epistemic modals are a good candidate in the connection of grammaticalization (cf., e.g., Diewald 1999). An observation going back to Ross (1969) says that epistemic modals tend to be worse than root modals with pronominal forms such as German *es* 'it' on its use for propositions (cf. Drubig 2001, Gergel 2005, Houser et al. 2006, López & Winkler 2000, Winkler 2005 for recent discussion and cross-linguistic comparisons with the German *es*).

(56)	Ottokar muss singen, und du musst es auch.			
	O. must sing and you must/can ES too	(root modal & es)		
	O. must sing and you must too.			

(57) * Ottokar muss Krebs haben, und Albert muss es auch.O. must cancer have and Albert must ES too (*epistemic & es)

The modal *wollen* on most of its readings – including our main focus here, i.e. the volitional reading – is not epistemic. (For epistemic readings, incidentally, nothing changes with respect to the original observation, i.e. they are bad with the proform.) Nonetheless, we extend the test with an observation beyond the traditional epistemic/root distinction. The test shows that the quotative and the oblique-raising *wollen* (both on the weak and the volitional reading) are ruled out as licensers of the proform, as shown in (58)-(60), thus paralleling the items that have grammaticalized in the language.

(58) Maria will singen und Peter will es auch. ("regular" wollen)
M. wants sing and Peter wants ES too
Maria wants to sing and Peter does, too.

(59) *Maria will die Arbeit selber geschrieben haben und Peter will es auch.
Maria wants the work herself written have and Peter wants ES too
'Maria claims that she has written the work herself and Peter does, too.'

(quotative)

(60) *Maria wollen die Pommes nicht schmecken und Anna wollen es auch nicht.
 Maria.DAT want the French fries not taste and Anna.DAT want ES too not
 'Maria doesn't (want to) like the fries and Anna doesn't either.'

(oblique raising)

We are not in a position to engage into a further debate as to the structural conditions for the acceptability of the proform *es.* (We in fact even remain agnostic about whether the treatment of the phenomenon should be taken in purely structural terms, e.g. along the lines of a richly articulate structure. A further issue regards the investigation of the deep vs. surface proform properties in the sense of Hankamer & Sag 1976). Nonetheless, the test yields clear distributional evidence that the configurations with *wollen* have a similar behavior to items that have undergone a process of grammaticalization. A note is in order on the acceptability of *wollen* in its complementation pattern with a nominative subject since it is acceptable with proforms like *es.* Are we dealing with two *wollen*'s? Probably not. What is happening though is that when *wollen* takes a nominative subject and a nominal proform its complementation pattern with NP complements may interfere and render the sentence interpretable as a *wollen*+NP configuration (independently of the semantics one pursues for such structures). Crucially for our purposes, when this option is not available, namely in the raised-oblique configurations, the insertion of the proform is unacceptable on the volitional reading as well.

3.7 Summary of the analysis

In this section, we have argued that there is positive evidence that comes chiefly from embedded experiencer verbs for *wollen* under various interpretations to be analyzed as a raising verb and we discussed the main ingredients for the raising analysis proposed. The major necessary conditions have been the coherence property and the abandonment of the classical version of the Theta Criterion. In the next section, we draw some additional theoretical conclusions on the latter.

4 A Note on the Theta Criterion

The two observations, that *wollen* is both a raising verb and assigns its subject the theta role [+vol], lead to a clash for a theoretical concept that has been assumed since the late seventies in Chomskyan grammar: the Theta Criterion. It has two parts: (i) it requires each theta role to be assigned to one argument, and (ii) it bars an argument from being assigned more than one theta role (by movement). The argument that moves into the subject position as claimed above, does exactly that: it combines two theta roles by movement.

In order to understand the implications of this analysis, let us briefly review the history and empirical content of the Theta Criterion. The first version of it goes back to Freidin (1978) who derives effects of the Strict Cycle Condition (SCC) from more general principles in order to

abandon the SCC. The core example that he could not easily account for is (61). Here, the object argument *Mary* moves to the embedded subject position after the subject *Fred* has vacated this position. From a current point of view this is movement from a theta position into another theta position.

(61) *Fred was reported Mary_i to have kissed t_i. (Freidin 1978: 534)

Freidin proposes the Principles of Functional Relatedness and Functional Uniqueness as given in (62) - (63).

(62) Functional Relatedness:

In a sentence S_i , each lexical NP with nonnull semantic content must fill some argument position in the logical form of S_i

(63) Functional Uniqueness:

In a sentence S_i no lexical NP may fill more than one argument position for any given predicate in the logical form of S_i

Functional relatedness ensures that arguments are related to an argument position. Functional uniqueness restricts arguments to only one argument position. (63), Functional Uniqueness, rules out the above example (61).

Chomsky (1981) takes this idea up and strengthens it to the Theta Criterion as given in its simple version in (64) and the LF/ chain version in (65).

- (64) *Theta Criterion (S-structure and D-structure version)*: Each argument bears one and only one θ-role, and each θ-role is assigned to one and only one argument. (Chomsky 1981:36)
- (65) Theta Criterion on LF Given the structure S, there is a set K of chains, $K=\{C_i\}$, where $C_i = (\alpha_{1}^{i_1}, ..., \alpha_{n}^{i_n})$, such that
 - (i) if α is an argument of *S*, then there is a $C_i \in K$ such that $\alpha = \alpha_j^i$ and a θ -role is assigned to C_i by exactly one position P.
 - (ii) if *P* is a position of *S* marked with the θ -role R, then there is a $C_i \in K$ to which *P* assigns *R* and exactly one α_j^i in C_i is an argument.

(Chomsky 1981:335)

The Theta Criterion is meant to apply at all levels of structures. At LF it is needed as this is the level of interpretation. At D-structure, Chomsky argues, we need it to exclude movement from a non-theta position into a theta position. Empirically, the ban on the movement from a non-theta position into a theta position was seen as necessary, because there is no such verb as BELIEVE which has the properties of *believe* except that it does not assign accusative case, but a subject theta role as seen in (66).

(66) *John [VP t' BELIEVES [IP t to seem that Peter likes Mary]] (BELIEVE: does not assign accusative but a subject theta role)

However, this type of construction is not ruled out by the Theta Criterion at LF but by the one holding at D-structure (cf. Bošković 1994, Hartmann 2003 for discussion); with D-structure gone in the Minimalist Framework (cf. Chomsky 1995 and follow-up work), this part of the Theta Criterion is in need of reformulation, as Bošković (1994) pointed out correctly. It nevertheless survives in an updated version to ensure that arguments start out in theta positions, cf. the current version of the Chomskyan Theta Criterion in (67).

(67) θ -theoretic Principle

Pure Merge in θ -positions is required of (and restricted to) arguments. [Where Pure Merge is merge that is not part of Move (external merge in more recent terminology)] (Chomsky 2000:103)

Thus, the question is whether we can find a way to explain the ungrammatical examples in (61) and (66) without taking recourse to the Theta Criterion in its current form. With respect to movement from a theta position to another theta position, several suggestions have already been made to account for these cases: Bošković (1994) e.g. claims that in these cases, the arguments A-move from a case position into another case position, an illicit/impossible derivation. If this analysis is on the right track, our examples are licit, the movement that we proposed is not into a second case position.¹⁶

As for the second problematic set, movement from a non-theta position into a theta position, this can be derived if merge in the core lexical domain is driven by theta-role assignment along the lines as proposed by Higginbotham (1985) (for a similar proposal see Kallulli 2006). Thus, an argument can never start out in a non-theta position, and therefore, cannot move from such a position into a theta position.

In sum, the violation of the Theta Criterion where an argument moves from one theta position to another theta position, seems to be both empirically possible (as seen in our analysis) and theoretically less problematic than generally assumed, as the effects of the Theta -Criterion can be derived independently.¹⁷

6 Conclusion

In this paper, we have presented a novel set of data with focus on the German volitional modal *wollen*, contributing to the debate whether all modals are raising verbs as proposed by the GRH (Generalized Raising Hypothesis) clearly put forward in Wurmbrand (1999). Previous discussion of GRH has mostly omitted the volitional modal as its theta-assigning properties lead to a paradox in the theory: *wollen* assigns a theta role to the subject and raising of an argument into this position would lead to a violation of the Theta Criterion. The data that we presented strongly suggest that exactly this is happening. In a small set of configurations of the modal embedding a class of experiencer verbs, it is possible for the oblique argument to be interpreted as the volitional participant. As the dative case is visibly dependent on the embedded verb, whereas the volitional theta role [+vol] arises from the matrix modal, we concluded that this

shows that *wollen* indeed falls into the class of raising verbs. Thus, we suggested a raising analysis for the German volitional modal, supported especially by its behavior under VP-fronting and its coherence properties. Obviously, the proposed raising analysis is in conflict with standard assumptions about the Theta Criterion, which we proposed to be unproblematic as the relevant facts can be accounted for alternatively, in line with suggestions by Bošković (1994).

Notes

- ¹ The classical contribution of Wurmbrand (1999) does not discuss volitional modality. See, in particular, Reis (2001) for observations on, and a position with respect to, some possible and previously proposed amendments of the GRH.
- ² Notice, though, that (A) further "aspectual" readings of *wollen* are possible (we illustrate this, e.g., with (i) and (ii) below) and (B) it is questionable whether they should all be treated under the same semantic rubric. However, since aspectual readings in particular do not represent a problem for a raising analysis, we don't go further into this matter here.
 - (i) *Die Tassen wollten mir gerade aus der Hand fallen, als mir Natascha zu Hilfe kam.* the cups wanted me just out of the hand fall, when me Natascha to help came 'I was about to drop the cups when Natascha came and helped me out.'
 - (ii) Jedenfalls wollte ich fast vom Stuhl fallen, ... anyway wanted I almost off chair fall 'I almost fell off my chair...'
- ³ We indicate stress through capitals in (9), but do not use capitalization elsewhere in the text to mark stress since, in particular, many examples are ambiguous between volitional and weak readings as we have said.
- ⁴ While we note here that the anti-reduplicative restriction applies to the volitional reading of raised obliques, a reviewer of an earlier abstract points out that it interestingly applies to volitional modals with raised nominatives. While this common distribution clearly depends on the group of speakers, we take it to be an interesting common feature and correlation in distribution for the speakers who have the volitional reading in both cases.
- ⁵ In a system such as Dowty (1991) volition is a prototypical thematic role; see below.
- ⁶ With all the instances of *wollen* that could interact with the raised argument, both context and intonation play an important role.
- ⁷ A distinct point is the one regarding the status of *wollen* itself, i.e. its first-merge position. We have said that this position is V and in particular not the typical Infl-domain or T. We do not think though that other types of projections should be necessarily ruled out if the appropriate evidence can be marshaled. For one thing, projections in the vP domain may become relevant.
- ⁸ Note that the main idea also seems compatible with a remnant-movement analysis. The main point for us is that *wollen* and the argument carrying volition are in a semantic relationship to one another in virtue of the derivational process, in particular, while *wollen* was in its first-merge position the argument eventually marked for volition "passed through" the specifier position of the projection of wollen. Given that, e.g., for Müller (2004) the relationship between SpecCP and C is a reflex of an earlier derivational step, the compatibility follows.
- ⁹ Wurmbrand also uses passivization to argue against a thematic external argument for modals. Modals do not allow for matrix passivization:
 - (i) a. *Der Wagen wurde (zu) reparieren gekonnt/können.

The car.NOM was (to) repair can.PARTP/.INF

'They were able to repair the car.'

b. *Der Wagen wurde (zu) reparieren gemußt/müssen. The car-NOM was (to) repair must.PARTP/.INF 'They had to repair the car.'

However, the fact that *wollen* cannot passivize (when it embeds a infinitival complement) does not necessarily mean that it does not have a thematic position.

- ¹⁰ The notion *coherence vs. non-coherence* goes back to Bech's seminal work on infinitives in German (Bech 1955). The basic difference is that coherent verbs allow operations affecting the clause boundary of the embedded infinitive (they are transparent) whereas the infinitival complement is opaque to such operations with non-coherent verbs. The empirical facts have been subject to a large range of investigations, cf. Grewendorf (1987), Kiss (1995), Wurmbrand (2001), Lee-Schoenfeld (2007), Hinterhölzl (2006), among others. The notion *coherence (Kohärenz)* vs. *non-coherence (Inkohärenz)* is mainly used in the literature on German, the phenomenon, however is attested in many other languages, and usually referred to as *restructuring*.
- ¹¹ The distinction between obligatorily non-coherent and optionally coherent verbs can be tested by the pronoun test when the complement of the matrix verb is not extraposed. Optionally non-coherent verbs allow a pronoun to scramble over the subject, obligatorily non-coherent verbs do not (cf. Höhle 1978, Haegeman & van Riemsdijk 1986, von Stechow & Sternefeld 1988, among others).
 - (i) a. dass der Vater das Kind zu belohnen beabsichtigt. that the father the child to reward intends 'that the father intends to reward his child.'
 - b. dass es der Vater zu belohnen beabsichtigt. that it the father to reward intends 'that the father intends to reward it.'

It has also been argued that the class of optionally coherent verbs is more diverse and must find a more fine-grained analysis than that. For suggestions along these lines, see Wurmbrand (2001) and Lee-Schoenfeld (2007).

- ¹² The fact that *wollen* induces an IPP effect (in the perfect the infinitival form *wollen* is used instead of the participial form *gewollt*) is another piece of evidence that it construes as a coherent verb (cf. Hinterhölzl 2006).
- ¹³ We do not consider the scrambling and scope of negation test here, because *beabsichtigen* 'intend' is optionally coherent for which these two tests do not yield the relevant difference. For an overview of the tests, see e.g. Grewendorf (1987), Lee-Schoenfeld (2007), Hinterhölzl (2006).
- ¹⁴ The same observation can be made for Hungarian where, again, we do not find the relevant reading and restructuring tests show that *akar* 'want' is restructuring (as can be seen from its particle climbing behaviour, cf. Kenesei 2001).
 - (i) a gyereknek nem akar tetszeni ez a film the child.DAT not wants like.INF this DET movie '*The child doesn't want to like this movie.'
 - (ii)Anna **ki** akar fut-ni.

Anna out wants to run

'Anna wants to run out.'

(Kenesei 2001: 80)

- ¹⁵ Why the reading in Dutch is not available is not entirely clear, though it might be related to some independent difference between Dutch *willen* and German *wollen*. E.g. Dutch allows a use of *willen* that is not possible in German:
 - (i) a. Het wil hier *(wel eens) regenen. it wants here sometimes rain 'It is likely to rain here.'
 - b. Jan wil wel eens een pilsje drinken.
 Jan wants sometimes a beer drink.
 'Jan is likely to drink a beer.'

'Jan wants to drink beer from time to time.'

(Rooryck 2002)

Furthermore, a quotative reading as in (5) above is not available in Dutch. A close comparison after a comprehensive investigation of the Dutch modal system could provide further insight into the issue, but it is beyond the focus and scope of this paper.

- ¹⁶ Alternatively, one might take as the important point in (61) that one argument combines two theta roles from one single predicate by movement, whereas in the grammatical version that we observe, two theta-roles from two different predicates are combined, one from the matrix predicate *wollen* 'want' and one from the embedded verb. Thus, a reformulation of the Theta criterion accordingly would suffice.
- ¹⁷ We did not discuss the part of the Theta Criterion that requires each theta role to be assigned to one argument. As Brody (1993) argues, this part (and a weak Theta Criterion in general) can be derived from general principles of interpretation.

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