

Impersonal middles in German

Marcel Pitteroff¹ & Marika Lekakou²

¹University of Stuttgart, ²University of Ioannina marcel.pitteroff@gmx.de, mlekakou@cc.uoi.gr

Abstract

We develop an analysis of impersonal middles in German which capitalizes on the observed similarities between personal and impersonal middles, and on Lekakou's (2005) treatment of the former as disposition ascriptions. We argue that the disposition in impersonal middles is ascribed to an event(uality), rather than an event participant. The non-omissible 'it' subject pronoun functions as the syntactic and semantic subject. We further propose that the pronoun refers to the event denoted by the verbal predicate by virtue of taking as its associate the vP. The additional modifier is required for pragmatic reasons, namely in order to restrict the generalization made.

Keywords: impersonal middles, disposition ascriptions, German, (expletive) voice, pronouns, events

1 Introduction: (Im)personal Middles

The topic of this paper are impersonal middles (henceforth IM) in German. The construction, exemplified in (1), is impersonal because it features what is considered a non-referential pronoun in subject position, and an intransitive (unergative) verb. Furthermore, in German IM require the weak reflexive pronoun. Finally, IM include a manner/evaluative adverb, such as 'easily', and what we will refer to as an 'additional modifier', which in (1) is the locative PP 'in this chair'.

¹ IM also exist in Dutch, a language closely related to German. Dutch IM share the main properties identified for German IM, except for the fact that they disallow the weak reflexive (*zich*). See Pitteroff & Lekakou (2018) for an analysis which, building on the current proposal, extends to Dutch as well.

(1) diesem Stuhl. Es sitzt sich angenehm auf It sits REFL comfortably this chair on 'One sits comfortably in this chair.'

The limited literature on IM (see Ackema & Schoorlemmer 1994, 2006/2017; Broekhuis & Corver 2015; Fagan 1992; Hoekstra & Roberts 1993; Lekakou 2005; Pitteroff 2014; Steinbach 2002) takes them to belong to the same family as personal middles (henceforth PM), as in (2). PM feature a referential DP in subject position and a transitive verb (or, more neutrally, a verb with a transitive variant). PM also feature a manner/evaluative adverb, but no additional modifier is required.

(2) Das Buch liest sich leicht.
the book reads REFL easily
'The book reads easily.'

The following similarities have been observed between PM and IM. First, both PM and IM are generic statements, i.e. derived statives. Stative predicates cannot occur as the complement of verbs of perception, nor as answers to questions like *What is going on?* As Ackema & Schoorlemmer (henceforth A & S) (2006/2017) show, neither PM nor IM can appear as complements to perception predicates (see (3a) and (4a) respectively, based on A & S's Dutch data). Moreover, as (3b) and (4b) show, neither PM nor IM are acceptable replies to an episodic question such as 'What is happening?'.

- (3) a. *Ich sehe, dass das Buch sich schlecht liest.

 I see that the book REFL with-difficulty reads

 'I see the book reads with difficulty.'
 - b. Was geschieht da? #Das Baby wickelt sich schlecht.
 what happens there? the baby cleans REFL with-difficulty
 'What is happening? It is difficult to change the baby's nappies.'

- (4) a. *Ich sehe, dass es sich in dieser Disko gut tanzt.

 I see that it REFL in this disco well dances
 'I felt that one dances well in this disco.'
 - b. Was geschieht da? #Es tanzt sich gut in dieser Disko.what happens there? It dances REFL well in this disco'What is happening? One dances well in this disco.'

Second, both PM and IM in German lack a syntactically represented external argument.² For example, no agentive *by*-phrase is licensed, as shown in (5) and (6).

- (5) Frisch gebackenes Brot schneidet sich schlecht (*von Hans). freshly.baked bread cuts REFL not.easily by John 'Freshly baked bread doesn't cut easily (*by John).'
- (6) a. *Von älteren Menschen sitzt es sich angenehm in diesem Stuhl.

 by elderly people sits it REFL comfortably in this chair

 Intended: 'Elderly people can sit comfortably on this chair.'
 - b. *Es fährt sich sogar von großen Menschen gut auf diesem Rad. it rides REFL even by tall people well on this bike Intended: 'Tall people can ride this bike nicely.'

Third, the same morphological marking appears in PM and IM: both require *sich* in German (A & S 2006/2017; Broekhuis & Corver 2015; Lekakou 2005; Schäfer 2008, a.o.). Related to this is a fourth similarity: IM and PM pattern alike in terms of auxiliary selection (A & S 1994: 83): both select 'have' and not 'be', as illustrated in (7):

- (7) a. Dieses Buch hat/*ist sich gut gelesen. this book has/ is REFL easily read 'This book has read easily.'
 - b. Es hat/*ist sich in diesem Bett gut geschlafen.it has/ is REFL in this bed well slept'One has slept nicely in this bed.'

² This does not hold universally; for instance, French and Greek PM have been claimed to involve a syntactically active implicit Agent (Lekakou 2002, 2005); see also A & S's (2006) Type-II middles.

Given the above considerations, a unified analysis of IM and PM is obviously desirable.

Our analysis of IM builds on Lekakou's (2004, 2005) approach to PM. Lekakou argues that PM are disposition ascriptions to a Patient or Theme argument. If IM are similar to PM, and thus dispositional sentences, the question arises: what is the disposition ascribed to in IM? We propose that, like PM, IM are dispositional sentences (in the sense of Lekakou (op.cit.)). The difference is that IM do not ascribe a disposition to an event participant, but to an event(uality). The 'expletive' pronoun in the subject position of IM is not expletive, nor non-referential: it is the syntactic and semantic subject of the sentence. It is base-generated in the specifier of a projection hosting the dispositional generic operator Gen, and takes as its associate the vP. As for the additional modifier in IM, we maintain that the requirement for it is not syntactic, but semantic/pragmatic: the modifier is required in order to restrict the generalization expressed by IM.

The paper is structured as follows. In section 2, we provide some background on the syntax and semantics of PM, focusing especially on the dispositional approach proposed by Lekakou (2004, 2005), and on the morphosyntax of PM in German. In section 3 we introduce and discard an idea frequently pursued in the literature, namely that the additional modifier is (or contains) the semantic subject of IM. In section 4 we spell out our proposal. Section 5 concludes.

2 Background on Personal Middles

2.1 Personal Middles as Disposition Ascriptions

According to Lekakou (2004, 2005, 2008), the semantic core of PM, shared cross-linguistically, is as stated in (8):

(8) PM ascribe a disposition to the Patient/Theme.

Lekakou (2004, 2005) identifies disposition ascriptions (DA) as a type of generic sentence, or an interpretation that generic/characterizing sentences may receive (see e.g. Krifka et al. 1995). Sentences such as the ones in (9), for instance, are ambiguous

between a habitual reading, which involves quantification over recurring events, and a dispositional interpretation, which states the potential of the subject referent to act in the manner stated by the predicate. In contrast to the habitual interpretation, on the dispositional reading, the truth of the sentence does not require that such events have (regularly) taken place.

- (9) a. My car goes 160 mph.
 - b. Mary handles the mail from Antarctica.
 - c. This machine crushes oranges.

For habituals, Lekakou (2004, 2005) assumes the more or less standard quantificational treatment (see e.g. Krifka et al. 1995), according to which a covert sentence-level generic operator with quasi-universal force is posited, which quantifies over possible worlds. The semantic structure of DA, however, is different. The essence of DA, according to Lekakou (op.cit.), is that the truth of the generalization they express relies on properties of the syntactic subject. DA are thus treated as subject-oriented generic sentences. Technically, this is achieved by positing a generic operator for DA which applies at a lower level (namely the VP), and delivers therefrom a dispositional property; this property is then ascribed to the syntactic subject. The semantics of this operator is based on Brennan's (1993) proposed semantics for dispositional will. In what follows we briefly summarize the essence of this approach; see Brennan (1993) and Lekakou (2004, 2005) for detailed discussion.

According to Brennan, dynamic modals (e.g. ability *can* and dispositional *will*) relate properties and individuals and, as such, they are not S(entence)-level operators, but rather VP-modifiers. In addition to the height of attachment, a crucial difference between epistemic and dynamic modals lies in the nature of their respective modal bases: whereas S-level operators are restricted by propositions, introduced by 'in view of' (Kratzer 1981, 1991), VP-level operators are restricted by properties, introduced by *in virtue of* (IVO). Directly related to this, and to the fact that dynamic modals are VP-level operators, is the fact that the properties restricting the operator are necessarily properties of the syntactic subject. In this sense, dynamic modals are subject-oriented. Adopting this proposal for the generic operator in DA, Lekakou (op.cit.) proposes that in DA too the modal base that restricts the operator contains properties of the syntactic subject. DA are thus subject-oriented generic sentences.

One of the tests employed by Brennan (1993) to show that dynamic modals are subject-oriented has to do with the distribution and interpretation of *in virtue of* (IVO) adverbials. As evidence in favour of applying Brennan's approach to dynamic modals to dispositionals and PM in particular, Lekakou (2004, 2005) notes that IVO adverbials are necessarily subject-oriented in PM too (as they are when they combine with dynamic modals). Examples (10) and (11) –originally from Van Oosten (1977) and Dowty (2000)– illustrate this.

- (10) Crime novels read easily...
 - a. (in virtue of the way they are written).
 - b. (# in virtue of my reading skills).
- (11) Cottons shirts wash easily...
 - a. (in virtue of properties of the fabric).
 - b. (# in virtue of my washing skills).

Having very briefly presented the semantic approach to PM that we assume, let us look more closely at the (morpho-)syntax of PM in German.

2.2 The syntax of Personal Middles in German

Based on a syncretism in the morphological marking of anticausatives and middles, Schäfer (2008) proposes that middles are syntactically identical to marked anticausatives. As in many languages, in German anticausatives come into two types: (reflexively-) marked (12b) and unmarked (12a). PM as in (12c) show the same morphology as marked anticausatives.

(12) a. Die Vase zerbricht

the vase breaks

'The vase breaks.'

b. Die Tür öffnet sich.

the door opens REFL

'The door opens.'

c. Das Buch liest sich leicht.
the book reads REFL easily
'The book reads easily.'

The verb 'break' in (12a) is straightforwardly unaccusative: its sole argument is basegenerated as an internal argument and surfaces as the subject of the sentence. Semantically, the marked anticausative in (12b) patterns the same: no Agent is realized, and the structural subject is interpreted as a Theme. Schäfer argues that, in line with a configurational theta-theory, the subject in (12b) too is base-generated as the internal argument. According to him, the crucial difference between (12a) and (12b) is that unmarked anticausatives lack the projection that introduces the external argument (v*P or VoiceP, see, e.g., Kratzer 1996), whereas this projection is present in marked anticausatives. To account for the semantic absence of an Agent in marked anticausatives, despite the syntactic presence of an external argument position (Spec,VoiceP), Schäfer (2008) introduces a subtype of Voice head: expletive Voice. Expletive Voice projects a specifier, but, unlike agentive Voice, does not assign a theta-role; in other words it is semantically vacuous (see also Wood 2015; Wood & Marantz 2017). The reflexive pronoun is generated in Spec,VoiceP. Thus, marked anticausatives are semantically intransitive, but syntactically transitive.³

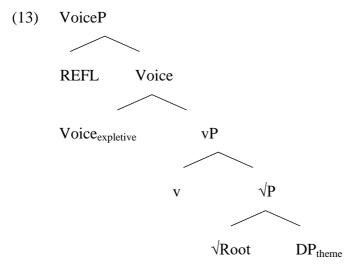
According to Schäfer (2008), PM are syntactically identical to marked anticausatives: both involve expletive Voice, which does not encode agentivity, and thus blocks the projection of a thematic external argument. Since expletive Voice in German is realized through *sich*, the identical morphological marking between marked anticausatives and PM falls out. The part of the syntax that is shared by PM and marked anticausatives under Schäfer's proposal is given in (13). Following basic assumptions of Distributed Morphology, Schäfer assumes category-neutral roots, which are categorized by dominating functional heads -v identifies verbs, n nouns, etc (e.g., Marantz 2001).

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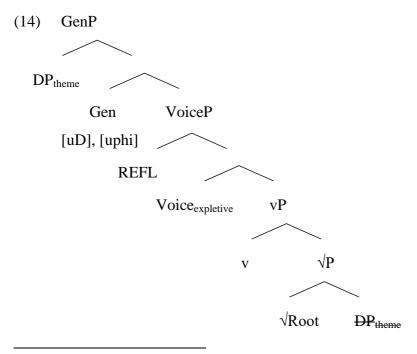
³ See Schäfer (2008) and Pitteroff & Schäfer (2014) for discussion of this aspect of the proposal vis-à-vis traditional unaccusativity diagnostics (such as auxiliary selection and the distribution of prenominal past participles).

⁴ Schäfer (2008)

⁴ Schäfer's (2008) assimilation of the syntax of PM to the one of marked anticausatives raises the question of how to derive the fact that the Agent is semantically present in PM, but not in anticausatives. See Lekakou & Pitteroff (2018) for discussion.



Adopting Schäfer's proposal for the morphosyntax of German PM, we combine it (as he does) with Lekakou's (2005) low generic operator. Unlike Schäfer, we assume that this operator (Gen) is a projecting, transitive head – which means that it projects a specifier (the latter property represented via the selectional [uD]-feature in (14), and has unvalued phi-features that need to be valued. As such, it attracts the closest active DP with specified phi-features to its specifier. The attracted DP serves as the subject of the dispositional predicate, which is created by the merger of Gen. We thus arrive at the structure in (14) for PM in German (with higher functional projections such as, e.g., TP being omitted).



⁵ Alternatively, Gen could be assumed to not project. In this case (which is more in line with Lekakou 2005), the subject of the dispositional predicate is in Spec,TP. We thank an anonymous reviewer for bringing this up.

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This concludes our brief summary of our background assumptions for PM. We now resume our focus on IM.

3 Impersonal Middles as Disposition Ascriptions to the additional modifier

Assuming a dispositional semantics to middles in general, an obvious question arises with respect to IM: what is the disposition ascribed to? A number of researchers (Broekhuis & Corver 2015; Hoekstra & Roberts 1993, see also Lekakou 2005; Pitteroff 2014; Steinbach 2002) have claimed that IM attribute a (dispositional) property to the instrument, location or time referred to by the nominal inside the adverbial PP. According to such analyses, what functions as the logical subject of the IM is (contained in) what we have called the additional modifier, i.e. the PP, or the NP within it (the different accounts are rather vague in this regard). For instance, in a sentence like (15) the logical subject is the PP 'in this disco', or the nominal 'this disco'. The meaning of (15), following the dispositional analysis of middles, would roughly be: 'in virtue of inherent properties of this disco, one dances well there'.

(15) Es tanzt sich gut in dieser Disko.

it dances REFL well in this disco

'One dances well in this disco.'

Since (15) appears to feature as the syntactic subject an expletive pronoun, for the PP/NP inside the sentence to function as the semantic subject, a special mechanism is required that links the syntactic subject and the PP. Indeed, the subject pronoun is claimed to associate with the modifier. The association relation is formally indicated in (16a) via co-indexation. This mechanism is claimed to be the same as the one occurring in contexts such as extraposition (16b) (Bennis 1986) or certain copula constructions (16c) (see, e.g., Bennis & Wehrmann 1987):

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⁶ Although neither Hoekstra & Roberts (1993) nor Broekhuis & Corver (2015) make reference to the notion of a disposition, we take it that their assumptions about the meaning of IM are compatible with a dispositional approach. Lekakou (2005) and Pitteroff (2014) do assume a dispositional semantics for middles. Our argumentation against this line of approach applies to all aforementioned authors. Alternative analyses of the role of the subject pronoun in IM are critically reviewed in Lekakou & Pitteroff (2018).

- (16) a. Es_i feiert sich gut [in dieser Disko]_i it celebrates REFL well in this disco 'One can celebrate well in this disco.'
 - b. Peter bereut (es_i) , $[dass\ er\ sich \ von \ Maria\ getrennt\ hat]_i$.

 Peter regrets it that he REFL from Mary separated has 'Peter regrets having split up with Mary.'
 - c. ...weil *(es_i) schön ist [in Salzburg]_i because it nice is in Salzburg '...because it is nice in Salzburg.'

There are a number of problems facing this approach, which suggests that an alternative should be sought for.

The first problem for this type of approach is that it predicts semantically implausible subjects for the dispositional sentence. Such an example is (17).

(17) Ohne Decke schläft es sich gut. without blanket sleeps it REFL well 'One sleeps well without a blanket.'

The predicted meaning of (17) is as follows: 'in virtue of some inherent property of blankets, one sleeps well *in their absence*'. It seems, however, odd to ascribe a disposition to an entity, which only manifests itself in the absence of that particular entity. After all, dispositions are defined as precisely those properties that are attributed to entities in virtue of their inherent make-up; it is hard to imagine how this sort of disposition could exist, since it would be a statement about the very absence of the dispositional subject.

A second, related, problem is that it is not only (locative) PPs that can appear in IM; other syntactic categories, such as AdvPs and AdjPs can perform the function of the 'additional modifier'. This is illustrated by the examples in (18) which feature a manner adverbial, a time adverbial and a depictive secondary predicate.

- (18) a. Leise streitet es sich einfach schlecht.

 quietly fights it REFL just badly.

 'It is just difficult to fight quietly.'
 - b. Es schreibt sich eben nachts am Besten.it writes REFL just at.night at.the best'One writes best at night.'
 - c. Aufgeregt singt es sich schlecht.

 nervous sings it REFL badly

 'One does not sing well when nervous.'

It is unlikely that such modifiers can act as the dispositional subject, given that they do not introduce an event participant that could be construed as the target of the disposition ascription.

A problem of uniformity arises when we consider cases of IM involving not an adjunct, but a lexically case-marked internal argument. Such is the case of (19). Under the approach discussed in this section, the pronoun in this case links the pronoun to an argument, in contrast to what happens in other instances of IM that we have considered thus far.⁷

(19) Alten Damen hilft/*helfen es sich leicht.

old.DAT ladies helps.3sG/help.3pL it REFL easily

'It is easy to help old ladies.'

Data such as (19) pose a threat to the purported parallelism between IM and extraposition or copular constructions, where what the pronoun associates with is an adjunct and not an argument. There is additional evidence that the parallelism between IM and extraposition and copular constructions breaks down, which space limitations prevent us from going into here; see Lekakou & Pitteroff (2018) for extensive discussion. This suggests that the mechanism that links the pronoun to the 'additional modifier' in fact is middle-specific. If a middle-specific mechanism is unavoidable, it had better be one that does not face the other problems, namely the semantic problem of admitting implausible subjects for the dispositional predicate,

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⁷ Note that in this case no additional modifier is required. Since the disposition targets here an argument, the term 'additional modifier' is clearly a misnomer.

and the failure to provide a uniform treatment to all instances of IM. In the following section we develop an analysis which relies on a linking mechanism, but sidesteps the aforementioned shortcomings.

4 Impersonal Middles as Disposition Ascriptions to events

Examples such (17), (18) and (19) constitute a challenge to a uniform approach to IM as a DA to a particular event participant. We thus propose to abandon the idea that the target of the DA in IM is an event participant. Instead, we propose that the dispositional subject in IM is, in fact, the event(uality) itself. On this approach, (17) is not a statement about blankets, but about sleeping events, namely ones that takes place without a blanket. The same holds true of the other examples: (18a) is a statement about fighting events, (18b) about writing events, (18c) about singing events, and (19) about helping events.

The details of this approach will be spelled out in this section. In 4.1 we suggest that the subject pronoun involved in IM is not expletive, but refers to an event, by associating, uniformly, with a vP. On this approach, the 'additional modifier' has no syntactic role to play (since it no longer is the subject of the DA). In 4.2, we show that this is a welcome result. We argue that the modifier in IM performs a semantic/pragmatic function only: it restricts the generalization made.

4.1 The syntax of IM as Disposition Ascriptions to events

Imagine that the subject pronoun in IM is not only the syntactic but also the semantic subject of the sentence, i.e. the subject of the DA. If so, IM are well-behaved DA (in the sense of Lekakou's approach to DA): they too ascribe a disposition to their syntactic subject. For this to be possible, the subject pronoun needs to be referential, and not expletive. There is reason to believe that this is actually correct. In line with Broekhuis & Corver (2015), Hoekstra & Roberts (1990), Lekakou (2005) and Pitteroff (2014), we take the reference of the pronoun to be determined by the element it associates with. In IM, we propose, the associate of the pronoun is the vP. The proposal is schematized in (20).

(20) weil es_i sich gut in dieser Disko [_{vP} tanzt]_i because it REFL well in this disco dances 'because one dances well in this disco.'

As verbs are predicates of events, the denotation of the vP is an event. This entails that the subject pronoun in IM ultimately refers to an event, and that IM are DA to an event.

Independently of IM, it has been suggested that expletive pronouns are not pure expletives, but function as the overt realization of the event/spatio-temporal argument; Felser & Rupp (2001), Heycock (1994) and Ramchand (1996) have made this claim in connection to existential constructions, which involve a *there*-type expletive. Unlike *there* expletives in existential constructions, *it* in middles refers to the event anaphorically, i.e. via the association with the verbal domain.

Our proposal predicts that the pronoun is obligatory in IM. In German, true syntactic expletives are restricted to sentence-initial position. In impersonal passives, for instance, the pronoun only occurs in sentence-initial position, and is barred from appearing in a sentence-internal position, see (21a). In IM, on the other hand, the pronoun is obligatorily present, regardless of its position, witness (21b). Thus, whereas in impersonal passives the pronoun is a true expletive, in IM it is not – in line with our proposal.⁸

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(21) a. Hier wird (*es) getanzt.

here is it danced

'Dancing takes place here.'

b. Hier tanzt *(es) sich gut.

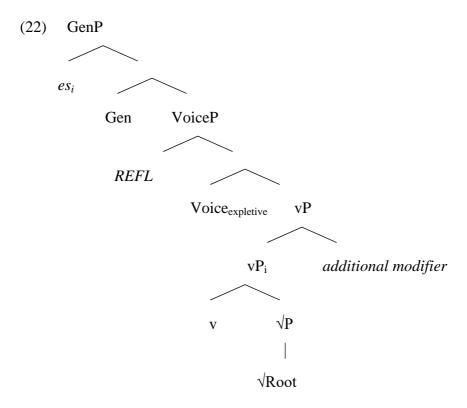
here dances it REFL well

'One dances well here.'
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Following Bennis (1986), Ruys (2010) and Vikner (1995), we assume that 'it'-type pronouns differ from 'there'-type pronouns in being argumental and fully specified for phi-features (see also Cardinaletti 1990; Deal 2009; Richards & Biberauer 2005).

⁸ As discussed in Lekakou & Pitteroff (2018), further support comes from Dutch, where the two subject pronouns are distinct in form: the subject of IM is *het*, the subject of impersonal passives is *er*. The former has been analyzed as quasi-argumental (see discussion below (22) in the main text).

Due to its nominal nature and its phi-specification, the pronoun that occurs in IM can value the unvalued phi-features on Gen, occupy its specifier, and thus function as the dispositional subject. The pronoun in IM is thus merged in Spec,GenP as the subject of the dispositional predicate (for arguments against an alternative, according to which the pronoun is moved to Spec,GenP, see Lekakou & Pitteroff 2018). The syntactic structure we propose is given in (22).



As in the case of (marked) anticausatives and PM, the syntax of IM involves expletive Voice, which hosts the reflexive pronoun in its specifier and blocks the potential introduction of a thematic external argument. Since IM are generally based on unergative predicates (unlike (marked) anticausatives and PM), IM are syntactically unergative. As a consequence, IM are correctly predicted to fail the unaccusativity diagnostics (recall, for instance, that they select 'have' and not 'be').

issue, not entirely determined in narrow syntax.

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⁹ We omit representation of 'easily', which is not directly relevant for our current concerns (it can, for instance, be an outer adjunct). For the sake of simplicity, we also abstract away from V-to-C movement. Thus, the tree in (22) does not represent how the structure is linearized; this is (also) a PF-

4.2 The Additional Modifier

Our proposal is that the pronoun in IM is the syntactic and semantic subject of the sentence. Via the pronoun's association with the vP, the disposition is ultimately ascribed to an event(uality). Why then do IM require an additional modifier? We propose that this modifier is needed for semantic/pragmatic reasons, namely to restrict the generalization made.

Let us consider an IM without an additional modifier, as in (23).

(23) (Ich glaube,) #dass es sich gut tanzt.

I believe that it REFL well dances

'#I believe that one dances well.'

Sentence (23), we argue, is syntactically well-formed, but semantically problematic (whence the #-notation). The sentence expresses that in virtue of their internal makeup, dancing events are such that dancing is good. The generalization made by (23) is too broad – and inevitably false (cf. Goldberg & Ackerman 2001). What is required for (23) to be felicitous is a proper restriction of the generalization. This restriction is contributed by what we have been referring to as 'the additional modifier' (which, recall, can be a PP, but also a secondary predicate, or even an oblique argument).

Evidence in favour of our proposal comes from the fact that the additional modifier may be omitted, if the required restriction is contributed contextually. Consider (24), where the linguistic context includes explicit mention of the 'additional modifier', namely *naakt* 'naked':

(24) Context: John decided to try and live the life of a nudist. After a couple of days, Peter asks him:

Wie ist es so die ganze Zeit nackt zu sein? Naja, es schläft sich gut. how is it so the whole time naked to be Well it sleeps REFL well ... Aber die Blicke der Passanten nerven schon.

...but the views of the passers-by are annoying indeed

'How is it to be naked all the time? Well, one can sleep well...but the astonished looks are annoying indeed.'

Importantly, under the analysis that treats the additional modifier as the dispositional subject (see section 3), (24) cannot be easily explained. One would be forced to assume some covert modifier that 'it' associates with and which functions as the semantic subject – an assumption that does not seem plausible. Nothing like that is required under our analysis, which effectively predicts the acceptability of such data.¹⁰

5 Concluding remarks

We have assumed, following Lekakou (2004, 2005), that middle sentences in general are best characterized as disposition ascriptions. We have proposed that IM in particular also involve a disposition ascription, albeit not to an event participant, but to the event itself. We have developed an analysis of IM in German along these lines. The non-omissible subject pronoun in IM is base-generated as the subject of the dispositional predicate, taking the vP, the syntactic locus of the event description, as its associate. Via its association with vP, the pronoun refers to an event. The subject pronoun thus functions as the syntactic and the semantic subject of IM. The function of the 'additional modifier' in IM is to restrict the generalization expressed.

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¹⁰ A further argument in favour of our approach comes from the observation that all and only event-related modifiers can function as the 'additional modifier' in IM. These are precisely the elements that can restrict the generalization made. See Lekakou & Pitteroff (2018) for discussion.

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