Abstract

The aim of this paper is to elucidate the nature of adverbial modification in Germanic middles. I present new arguments against semantic/pragmatic accounts and in favour of a ‘structural’ approach: the adverb is required in languages that lack a syntactically represented Agent in order for the latter to be recoverable via identification with the adverb’s Experiencer/Benefactor. This enables us to make sense of the fact that French and Greek middles do not require adverbial modification: these are languages, whose middles have a syntactically active Agent, and hence do not require adverbial modification as a means of recovering it.

Keywords: middles, adverbial modification, agent identification, Germanic, Greek, French

1. Introduction

It has long been noted in the literature that English, Dutch and German middles have to generally feature an adverb like *easily* (Keyser & Roeper 1984; Fellbaum 1986; Condoravdi 1989; Pitz 1989; Fagan 1992, among others):

\[(1a)\] This book reads *(easily).
\[(1b)\] Dit boek leest *(makkelijk).\] (Dutch)
\[(1c)\] Das Buch liest sich *(leicht).\] (German)
\[(1d)\] this book reads **easily**
\[(1e)\] the book reads **REFL easily**

At the same time, it has been claimed by Condoravdi (1989) and Ackema & Schoorlemmer (1994) that adverbless middles greatly improve in the presence of negation, a modal or focus on the verb, cf. (2). And lastly, there are cases of adverbless middles where none of these elements is required, cf. (3) from McConnell-Ginet (1994).

\[(2a)\] This book doesn’t read.
\[(2b)\] Bureaucrats may bribe, but you never know.
\[(2c)\] This rock DOES cut after all!
\[(3a)\] This silk washes.
\[(3b)\] This dress buttons.

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There have been two principal approaches to the adverb in middles. On the semantic account defended by Condoravdi (1989) and McConnell-Ginet (1994), the adverb is required for reasons of semantic well-formedness. On the closely related pragmatic approach the adverb is required for pragmatic reasons (namely, informativity). Most recent work on middles (cf. Ackema & Schoorlemmer 2002; Steinbach 2002; Marell 2004; see also Goldberg & Ackerman 2001) has followed the pragmatic track: the most popular view seems to be that adverbless middles are uninformative, hence pragmatically odd, but not ungrammatical. A very different approach, advocated most notably by Roberts (1987), Pitz (1989) and Hoekstra & Roberts (1993), is to treat the requirement for adverbial modification as structural (term due to Ackema & Schoorlemmer 2002/2005), as a means of recovering the implicit Agent of middles. Adverbless middles are predicted to be ungrammatical on such a treatment.

In this paper I take issue with the semantic-pragmatic approach, and I contest some of the data that have been presented in its favour (e.g. (2)). I argue that the requirement for adverbial modification in Germanic middles is structural. In the following section I explicate the semantic/pragmatic approach and bring up the problems with it. In section 3 I argue that an alternative, structural account is to be preferred. Such an account also allows us to make sense of the cross-linguistic variation that the adverb-requirement attests, and to relate it to the more general pattern of syntactic variation in middles across languages. In section 4 I discuss the kinds of adverbials that the structural account predicts to be compatible with middles. Section 5 concludes.

2. The semantic/pragmatic account

Condovardi (1989) and McConnell-Ginet (1994) have argued that adverbial modification in middles is required for reasons of semantic well-formedness. Middles are generic sentences and hence their semantic representation involves a tripartite structure that consists of the generic operator \((\text{Gen})\), the restrictor and the nuclear scope of the operator. According to these authors, the adverb provides the scope for the generic operator and is necessary because the scope cannot normally be filled by contextual information. The semantic structure that Condovardi provides for the middle in (1) is given in (4). (4) says that generally events of reading the book are easy.

\[
\text{(4) } \text{Gen: } e \left[ \text{read (e)} \& \text{Book (Theme, e)} \right] \left[ \text{easy (e)} \right]
\]

McConnell-Ginet examines cases of middles without adverbial modification, where, according to her, the context makes it possible for the verb, which would normally be mapped onto the restrictor, to end up in the scope of the generic operator. This is what happens in the sentences in (3), repeated as (5) below:

(5a) This silk washes.
(5b) This dress buttons.

McConnell-Ginet explicates: “the context has provided restriction via implicit contrast among different modes of doing something, the main verb then being free to designate one such mode” [emphasis added: ML] (McConnell-Ginet 1994: 247). In other words, in the examples in (5) adverbial modification (‘modes of doing

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1 Due to the affinities between the semantic and the pragmatic approach, I will be treating them as a single one.
2 For the semantics of genericity, see Krifka et al. (1995).
something’) is still present. However, it is not contributed by an adverb, but by the verb itself.

There remain the cases of adverbless middles where it is the presence of focus, negation or a modal that apparently makes the lack of an adverb tolerable. It is straightforward for the semantic approach to accommodate the facts concerning focus, as it has been generally acknowledged that focus interacts with the partition of a clause into restrictor and scope (cf. Krifka et al. (1995) and references therein). In particular, focus on the verb can ensure that it is mapped onto the scope of the operator. However, a similar effect would have to be attributed to negation and modal auxiliaries: one would need to show that negation and modals can place the verb in the scope and not in the restriction of Gen. To the best of my knowledge, this has not been achieved yet.

The pragmatic approach to the adverb is related to the semantic one, in that the adverb is taken to be the core of the assertion and hence is not omissible, albeit for pragmatic reasons this time. Our knowledge of the world dictates that books are and can be read, for example. It is therefore hopelessly uninformative to utter middles that simply state this (as in (1)), without making reference to the manner in which such a common action can be or is generally performed.

There are two main problems with the semantic/pragmatic account. The first one has to do with the data. According to the speakers (of both British and American English) that I have consulted, adverbless middles are ungrammatical, not just hard to contextualize. This is in stark contrast with sentences like the ones in (6), which are pragmatically odd but grammatically fine. On the pragmatic approach at least, the corresponding middles should yield the same reaction, contrary to fact\(^3\).

(6a) One reads/can read books.
(6b) Books are (generally) read.
(6c) Books can be read.

The second problem concerns cross-linguistic variation. In languages like French and Greek, middles can do without an adverb, as the examples in (7) and (8) illustrate. The sentences in (7) are taken from Fagan (1992).

(7a) Le papier se recycle.
the paper REFL recycles
‘Paper is recyclable.’

(7b) Cette racine se mange.
this root REFL eats
‘This root is edible.’

(7c) Cette solution se discute.
this solution REFL discusses
‘This solution is debatable.’

(8a) To nero edo pinete.
the water here drink.NACT.3S
‘The water here is drinkable’

(8b) To yiali anaklkonete.
the glass recycle.NACT3S
‘Glass is recyclable.’

\(^3\) This is certainly a problem for the pragmatic account and possibly a problem for the semantic account as well, depending on what kind of offence semantic ill-formedness constitutes.
In order to accommodate this fact, we would need to say that French and Greek obey different pragmatic or semantic principles. To the best of my knowledge, there is no evidence that would argue in favour of different semantic representations of the middle in English and Greek; and postulating different pragmatic principles across languages is clearly an undesirable conclusion\(^4\).

In conjunction, these two objections compel us to follow a different route towards explaining adverbial modification in Germanic middles.

### 3. The alternative: a structural approach

In order to identify where the problem lies with adverbless middles in languages like English, let us examine what sort of interpretation such sentences can receive. Consider the paradigm in (9).

\begin{align*}
(9a) & \text{*This book READS!} \\
(9b) & \text{*This rock CUTS!} \\
(9c) & \text{*Bureaucrats BRIBE!}
\end{align*}

All sentences in (9) are ungrammatical on the middle interpretation. However, for (9c) there is a different interpretation available, on which the sentence is fine. This is the object-deletion reading, where ‘bureaucrats’ is the Agent of the bribing and the Patient has been left implicit. This reading is only available for (9c), because only this sentence features an animate subject, which can be interpreted as an Agent\(^5\). The point is that the interpretation of these sentences as middles is unavailable, and that is due to the lack of the adverb. This is a first indication that the adverb in middles has something to do with the recoverability of the implicit Agent—in the absence of the adverb, we ‘look’ at the syntactic subject for assignment of the Agent role—and, the availability of the middle interpretation itself.

I would like to side with Roberts (1987), Pitz (1989) and Hoekstra & Roberts (1993) in treating the adverb in middles as the means of recovering the implicit Agent. I will briefly discuss what I take this to mean presently. Before doing that, I should point out that contrary to Hoekstra & Roberts, who assign the Agent in middles to a *pro*, I do not consider the Agent in Germanic middles to be represented in the syntax. I refer the interested reader to Ackema & Schoorlemmer (1994) for convincing argumentation against the syntactic projectability of the middle-Agent in general and its alleged *pro-

\(^4\) A different alternative would be to explore whether Greek and French have at their disposal particular means through which the verb consistently ends up in the scope of Gen in the absence of an adverb. In pursuing this approach, it would be relevant to investigate whether (the semantics of) the imperfective plays a role. If that were to be the case, we would be led to a particularly interesting result, especially for the account of the variation in middles that I have been pursuing, which has been capitalizing on the role of the morphosyntax of the imperfective (cf. Lekakou 2002, 2003, 2005a).

\(^5\) According to an anonymous reviewer, the object-deletion reading is also available for (9a) and (9b), if we compute them e.g. in a fairytale world. This does not alter my point, which is that on the middle interpretation (on which the surface subject is understood not as an Agent but as a Theme), adverbless middles are ungrammatical. As for the precise interpretation of the surface subject, see Lekakou (2005a) for evidence that the syntactic subject of Germanic middles always corresponds to an Incremental Theme in the sense of Ramchand (1997).
incarnation in particular. In Lekakou (2005a), I have proposed that in ‘middle formation’, the Agent of the transitive entry is bound by the generic operator at a presyntactic level of Lexical Semantics, and does not project any further (it does not map onto subsequent levels of conceptual structure, nor does it reach the syntax)\(^6\).

Despite its syntactic inertness, the Agent is present from the point of view of the interpretation. In other words, the Agent feeds the semantic/interpretational component. The idea endorsed here is that the adverb is the means by which the Agent is present as part of the interpretation of middles. The semantic recoverability of the Agent through the adverb is effected by its identification with the Experiencer/Benefactor of the adverb (cf. Higginbotham 1985; Hoekstra & Roberts 1993). The proposal is given in (10)\(^7\):

\[(10a) \text{In Germanic middles, the adverb aids the recovery of the implicit Agent.} \\
(10b) \text{The implicit middle-Agent is recovered via identification with the implicit adverb-Experiencer/Benefactor.}\]

This kind of approach enables us to make sense both of the ungrammaticality of adverbless middles in Germanic, and of the grammaticality of adverbless middles in Greek and French. It is precisely languages like Greek and French that exhibit a syntactically active Agent. Therefore, there is no need for adverbial modification in order to recover this argument. Part of the evidence concerning the syntactic activity of the middle-Agent is the fact that by-phrases are possible in Greek and French middles\(^8\):

\[(11a) \text{Afto to vivlio diavazete efarista akomi ki apo megalus.} \\
\text{this the book read.NACT.3S with pleasure even and by grown-ups} \\
\text{‘This book can be read with pleasure even by grown-ups.’}\]

\[(11b) \text{Afto to provlima linete akomi ki apo anoitus.} \\
\text{this the problem solve.NACT.3S even and by fools} \\
\text{‘This problem can be solved even by fools.’}\]

\[(12a) \text{Ces étoffes se repassent facilement par tout le monde.} \\
\text{these fabrics REFL iron.3P easily by all the world} \\
\text{‘These fabrics can be ironed easily by everyone.’}\]

\[(12b) \text{La Tour Eiffel se voit de loin par tout le monde (qui veut bien la voir).} \\
\text{the Eiffel Tower REFL see.3S from afar by all the world (who wants well her see.INF)} \\
\text{‘The Eiffel Tower can be seen from afar by anyone (who really wants to see it).’}\]

As Ackema & Schoorlemmer (1995) have convincingly argued, the implicit Agent in English, Dutch and German middles shows no evidence of syntactic activity. Moreover, it can be shown that the reflexive (sich) that appears in German middles is not a passivizer, in the sense that it does not signal suppression of the Agent and it does not realize this argument (see Lekakou 2005a, 2005b).

Let us now see what is going on with middles that do not (seem to) involve modification. There are two subclasses. One comprises the examples discussed above in connection with the semantic approach to middle-modifiers. I suggested there

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\(^6\) For a different set of data that also relate Voice and manner modification, see Cinque (1999: 101ff).

\(^7\) It is of course not trivial to achieve this result in a way that does not violate compositionality and the Inclusiveness Condition. Space limitations prohibit me from going into this important issue in depth. For a more extensive illustration of the proposal and of the mechanisms involved, see Lekakou (2005a, in press).

\(^8\) Many thanks to Eric Mathieu (personal communication) for providing the French examples in (12).
McConnell-Ginet’s treatment of cases like *This dress buttons* implies that there is a manner component in the sentence, albeit not in the form of an adverb, but in the form of a manner component in the meaning of the verb. So this kind of example does not threaten the proposed account.

The second class of cases is more interesting. These are the cases where focus, negation or a modal are claimed to rescue a middle construction in the absence of the adverb. As Ackema & Schoorlemmer observe, even if *easily* and *well* could be said to have an implicit argument of their own, which helps recover the suppressed middle Agent, this surely cannot be true of negation or focus (disregarding modals). I will show that the structural approach can deal with these cases as well. I will argue that adverbless middles that appear to be rescued by focus or negation are really rescued — to the extent that they are — by an implicit adverb. In other words, my claim is that there is adverbial modification, but it is implicit. On this view, if focus, negation and modals have any effect at all, it relates to the recoverability of the implicit adverb.

Although defending a pragmatic account of the adverb, Steinbach provides the following examples, which give a first indication that there is an implicit adverb and which argue in favour of the above approach. (The examples used are impersonal middles, but that is not relevant here.) As the glosses suggest, (13a) is interpreted as expressing, not that one can dance here, but that one can dance *here well*; and similarly for (12b).

(13a) Hier tanzt sich's.
   here dance REFL it
   ‘Dancing here is good.’
(13b) Hier lebt es sich, sagt der Zander.
   here lives it REFL says the pikeperch
   ‘The pikeperch says this is a nice place to be.’

The same point applies to the Dutch example in (14) from Ackema & Schoorlemmer (2002). The authors’ gloss suggests that the sentence involves adverbial modification by an implicit *gemakkelijk* ‘easily’. What seems to license the implicit adverb is the expression *niet te geloven*, ‘not to believe’ (along with heavy stress on the verb). This does not arise solely when the expression occurs in a middle construction: *niet te geloven* plays the same role in (transitive and unergative) examples like (15a) and (15b):

(14) Die aardappels ROOIEN, niet te geloven!
   those potatoes dip-up, not to believe
   ‘I can't believe how easy to dig up those potatoes are!’
(15a) Jan zingt ARIA’s, niet te geloven!
   Jan sings arias not to believe
   ‘I can't believe how well Jan sings arias!’
(15b) Jan ZINGT, niet te geloven!
   Jan sings not to believe
   ‘I can't believe how well Jan sings!’

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9 This would explain why such sentences are extremely difficult for speakers to accept: not only has the Agent being suppressed, but the very element that would help recover it is also missing.

10 An anonymous reviewer points out that not all speakers agree with Steinbach’s judgments, and adds that she does not like the sentences. The observations I am making here therefore only apply to speakers who, like Markus Steinbach, find the sentences grammatical.
More generally, the interpretation that adverbless middles receive indicates that there is an adverb involved, albeit an implicit one. One of the very few ‘adverbless’ middles that native speakers of English accept involves the verb ‘translate’:

(16) This poem doesn’t translate.

However, it is important to clarify what property (16) attributes to ‘the poem’. (16) does not mean that the poem is literally impossible to translate; it means that the poem is very difficult to translate. Consider the following scenario. We have discovered a book of poems that is written in Martian, which we have unfortunately not managed to decipher yet. (16) cannot be used in this context. To give another example, the sentence in (17), which Condoravdi (1989) brings up, cannot be used about a rock which resists cutting altogether, but only about a rock which presents difficulties for anyone who tries to cut it.

(17) This rock does not cut.

In general, it seems that in all of the examples of adverbless middles with focus or negation that exist in the literature—to the extent that they are good—an adverb like well or easily is implied.

What about Greek? It has unfortunately proven extremely difficult to shed light on the interpretation of Greek adverbless middles, as different speakers give different judgments, and all appear to be very unsure of their intuitions. So I would not like to commit myself at this point as to whether there is an implicit adverb in Greek or not. There is, however, one case on which speakers’ intuitions seem to converge. The sentence in (18) cannot be used on the literal impossibility reading, which is the one favoured by our world knowledge (that Linear A has not been deciphered yet).

(18) I Gramiki A de diavazete.
   the linear A NEG reads,NACT,3S
   ‘It is impossible to read Linear A.’

To summarize, Greek and French do not place a requirement of adverbial modification in middles, because in these languages middles have a structurally represented Agent (in virtue of being parasitic on (reflexive) passives, see Lekakou (2003) and references therein). For English, Dutch and German middles, which do not project the Agent in the syntax, the adverb is required in order to ensure the semantic availability of this argument. My claim is thus that there is always adverbial modification in Germanic middles, and that there are in fact no grammatical adverbless middles, because the requirement for an adverb is a structural one.

In the following section, I briefly turn to the predictions of this account.

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11 I thank Sabine Iatridou for bringing up these considerations in the context of a discussion of the claim advanced in Sioupi (1998) for Greek, that adverbless middles involve an ability modal operator (instead of the generic operator, which appears whenever there is an adverb). By postulating an ability operator, we predict the literal impossibility reading to be available. This is not true in English; the case of Greek is more complicated, as will be discussed presently.

12 If it turns out that there is no implicit adverb in Greek/French, then it could be argued that for these languages, adverbial modification in middles is conditioned by semantic/pragmatic factors. This would make sense, as it is standardly pragmatic/contextual factors that disambiguate a multiply ambiguous form, such as the Greek imperfective nonactive (NACT) form, and the French se-construction.
4. Delimiting the set of appropriate middle-modifiers

One of the opponents of the ‘structural’ view of the adverb is Condoravdi (1989), according to whom this kind of approach leads to the false prediction that “the class of adverbs appearing in the middle should be coextensive with the class of adverbs having a benefactive role” (Condoravdi 1989: 20). I believe it is possible to avoid making this prediction without giving up the structural account, namely by identifying an independent reason why certain adverbials are excluded from the middle. The independently motivated account of middles as sentences ascribing a dispositional property to their syntactic subject (Lekakou 2004, 2005a) provides just such a way out.

The essence of disposition ascriptions (or ‘in virtue of’ generics) is that they are restricted by properties of their subject. The generalization that middles as disposition ascriptions make relies on properties of the subject: it is properties of the subject of (dispositional) predication that are crucial with respect to the generalization that the middle asserts. The truth of a sentence like *This book reads easily* depends on properties inherent in the book, and not on properties of a potential Agent/reader or of the circumstances under which the event takes place. In less informal terms, the restrictor of the generic operator of dispositionals comprises properties of the syntactic subject13.

What is crucial for our present purposes is that the dispositional semantics, which characterizes middles across languages, dictates that any adverb that is Agent-oriented in the sense of invoking or ascribing properties to the implicit argument will be incompatible with the middle interpretation.

This is the reason why cases like (19) are illicit (cf. Fellbaum 1986). Adverbs like *expertly*, *carefully* and *cautiously* attribute a property to the Agent of the action denoted by the verb, namely they specify that the Agent has some sort of expertise, is (being) careful and cautious respectively14. This clashes with the dispositional semantics of middles, whereby only properties of the subject are relevant for the generalization made. Were there an interpretation besides the middle available, the sentences would be grammatical on that interpretation (cf. (19d)):

(19a) *This little flashlight plugs in expertly.
(19b) *Red wine spots wash carefully.
(19c) *Cotton irons cautiously.
(19d) Bureaucrats bribe carefully.       (OK on the object-deletion reading)

We can also employ Greek to further illustrate this point. (20) can be interpreted as a plain habitual, which states that the paper is in general read carefully, or it can express a deontic generalization, in which case the sentence expresses the way in which the paper should be read. Crucially, the sentence is bad on the middle interpretation, for the same reason as (19a)-(19c): ‘carefully’ is incompatible with a disposition ascription to the internal argument.

13 This approach to the genericity of middles is based on the modal semantics (essentially of Kratzer 1977) attributed to the generic operator (cf. Krifka et al. 1995) and inspired by Brennan’s (1993) work on the syntax and semantics of modal operators. In particular, I employ in the realm of genericity Brennan’s idea that the traditionally deemed ‘root’ modals differ syntactically and semantically from the epistemic ones, and I argue that, similarly, there exist at least two subtypes of sentence-level genericity: the more familiar habituality, and the less discussed dispositionality (= ‘in virtue of’ genericity). See Greenberg (2003) for the notion of ‘in virtue of’ genericity applied to NP-genericity, and see Krifka et al. (1995) for discussion of the distinction between NP- and sentence-level genericity.

14 See Geuder (2000) for an analysis of the relation between manner and agentive readings of adverbs, according to which the manner reading of adverbs like *stupidly* is derived from the agentive reading.
Before concluding, I would like to mention a final argument advanced by Condoravdi against the view advocated here. Condoravdi points out that time-span adverbials are problematic for the sort of account I have been defending here, because there can be no plausible Experiencer associated with them, and yet they are good in middles. One of Condoravdi’s examples of such an adverbial is *in a jiffy* (as in This book reads in a jiffy). However, as pointed out to me by Sabine Iatridou (p.c.), *in a jiffy* expresses ease rather than duration/time-span. Moreover, even adverbials that more clearly refer to a time-span are involved in contrasts of the following kind:

(21a) This book reads in a day.  
(21b) ??This book reads in a month.  
(22a) This tent assembles in seconds.  
(22b) ??This tent assembles in a week.

Examples such as the ones above strongly suggest that time-span adverbials are acceptable only to the extent that they can be construed as expressing the ease with which the action denoted by the verb is carried out. What is noteworthy about these examples is therefore that ease is apparently measurable in units of time. If this is on the right track, then Condoravdi’s major objection against the account of middle modifiers defended here disappears. More importantly, we are led to conclude that *easily* always modifies middles, in one guise or the other. This follows from a structural approach much more readily than from any other currently available account.

5. Conclusion

In this paper I have discussed the issue of adverbial modification in middles. I have pointed out the following problems with the semantic/pragmatic approach to the adverb (for at least Germanic languages): (a) native speakers of English, Dutch and German do not share the intuitions reported in the literature, and deem adverbless middles as ungrammatical, and (b) the adverb is not required in languages like Greek and French. An approach to the adverb in Germanic middles that takes it to be crucial in recovering the implicit Agent takes care of both these issues and fits in particularly well with the independently motivated bipartition of middles in two categories — the Greek- and the English-type middle, (cf. Ackema & Schoorlemmer (2002); Lekakou (2002) and subsequent work). Moreover, due to the dispositional semantics associated with middles, certain dyadic adverbs are excluded, because any adverb that makes reference to properties of the implicit Agent itself will cause a clash with the disposition ascription, which targets the internal argument.

There remain a number of now opened questions. The most pressing one concerns the identification process between the Agent of the verb and the Experiencer of the adverb. How can an implicit argument aid the recovery of another implicit argument?\(^{15}\)

Moreover, we have discovered the existence of minimal pairs like in (23):

(23a) This poem doesn’t translate.  
(23b) *This poem doesn’t read.

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\(^{15}\) See Higginbotham (1985).
We have as yet no means of understanding what sets ‘translate’ apart from ‘read’.

References


