

# Discourse Structure and Syntactic Embedding: The German Discourse Particle *ja*\*

Yvonne Viesel

University of Konstanz, Germany  
yvonne.viesel@uni-konstanz.de

## Abstract

German discourse particles (DiPs) do not add truth-conditionally relevant meaning but are elements of speaker attitude and indicate a relation between the information in their scope (p) and another piece of information (q) in the context. The DiP *ja* (literally ‘yes’) was claimed to be felicitous with a proposition p that the speaker believes common to both speaker and hearer, or immediately verifiable. However, formalizations modeling this into the use conditions of *ja* fall short on the DiP’s discourse function, which is to indicate that p is not used to address the current Question under Discussion but stands in a relation to q (pRq), where q is the information that the speaker makes another context update, pRq is intuitively explanatory, and p is not necessarily known to anyone but the speaker. Regarding prerequisite grammatical properties of the DiP’s host constructions, data show that *ja* is not restricted to assertive, root-like environments and defies predictions about not being able to appear in the scope of descriptive operators. Instead the data suggest that the DiP’s licitness in surprising positions depends on information-structural factors.

## 1 Introduction

German discourse particles (DiPs) are elements of speaker attitude and usually appear clause-medially in their scope position above vP<sup>1</sup>, the propositional core of the clause (Bayer 2012 [1]). Combinations of DiPs show them to be subject to a rather strict hierarchical order. Characteristically, they refer to the Common Ground (CG; Egg 2012 [5]) and relate the information in their scope to (another piece of information in) the discourse. Their distribution shows some DiPs to be sensitive to the clause type and illocutionary force of their hosts, most notably *denn* (roughly ‘I wonder’) and *ja* (literally ‘yes’, roughly ‘uncontroversially’), which are geared to interrogatives and declaratives, respectively.

DiPs differ regarding their ability to appear in non-matrix constructions. Those found in assertions are readily found in utterance-modifying (‘peripheral’) adverbial clauses (ACs) and non-restrictive relative clauses (RCs). This is expected insofar as such constructions are analyzed as conventional implicatures (CIs), which have “the same semantic force as a main clause assertion” (Potts 2005: 68 [19]). With regard to proposition-modifying (‘central’) adverbials, restrictive modifiers, and complement clauses, however, the situation is less clear. In earlier approaches, restrictions are proposed on principled grounds, e.g. Thurmair (1989, [23]) excludes DiPs from complement clauses except those of *verba dicendi*, and Coniglio (2008, [4]) still excludes them from factive clauses and central adverbials as well as restrictive modifiers. His analysis is in line with observations by Liliane Haegeman on root phenomena in general

---

\*For advice and discussion, I especially thank Josef Bayer, Maribel Romero, María Biezma, and Constantin Freitag.

<sup>1</sup> This also holds for cases in which topical material has scrambled to a position above the DiP.

(e.g. Haegeman 2002 [10]) and suggests the dichotomy between embedded<sup>2</sup> clauses to be due to a syntactic difference, with DiPs being illicit in clauses with a truncated left periphery accompanying their lack of illocutionary force. In time, more and more ‘exceptions’ have been recognized. Zimmermann (2011: 2023 [27]) allows for certain DiPs (*doch*, roughly ‘as you should know’, and *wohl*, roughly ‘presumably’) to appear in complements of “appropriate matrix predicates”, for instance the factive verbs *vergessen* (‘forget’) and *bedauern* (‘regret’). However, *ja*, one of the most frequent DiPs, is especially rare in embedded constructions of the non-CI type. Accordingly, it was claimed to be principally illicit in embedded position (except under *verba dicendi*; cf. Zimmermann 2011 [27], Kratzer 1999 [15]).

Moreover, “many” DiPs, like *schon* (roughly ‘nevertheless’), *doch*, *auch* (literally ‘also’), but explicitly not *ja*, have been argued to “contribute to discourse-level semantics [...] by relating *discourse segments*” (Egg 2012: 300 [5]). The present approach argues that the function of *ja* is to indicate that *p* is not used to answer to the current Question under Discussion (QuD) in the sense of Roberts (2012 [21]) but stands in a relation to *q* (pRq), where *q* is the information that the speaker makes another context update and pRq is intuitively explanatory. It must be acknowledged that the DiP *ja* contributes to discourse-level semantics.

Having established that *ja* is a discourse particle proper after all, original data is provided illustrating that even *ja* may be felicitously used in embedded constructions. Maintaining that the meaning and function of the DiP are the same as in main clauses, its rare occurrence in semantically integrated environments is more plausibly a mere side effect of its severely restricted use conditions. At any rate, the empirical situation of DiPs cannot be fully explained with recourse to the syntax of clausal left peripheries or the presence of matching illocutionary operators in types of constructions. The question will briefly be addressed if there are nevertheless grammatical prerequisites to be met by the host constructions for the successful employment of *ja*. The tentative answer at this point is that, yes, the role of *ja*-marked information in discourse is mirrored in the information structure of the DiP’s complement, with phonological focus being the least sufficient reflex thereof in reduced constructions like adjectival phrases (APs).

## 2 The DiP *ja* contributing to discourse-level semantics

The DiP *ja* is perceived to mark information as part of the CG (cf. Zimmermann 2011: 2012 [27]). But formalizations as by Gutzmann (2009: 53 [9]; cf. Kratzer 2004: 128 [14]) do not capture the ‘use conditions’ of a *ja*-utterance. As argued subsequently, it is neither sufficient nor necessary to fulfill the requirements in (1). In (1a) as well as the present account, *p* refers to the first semantic argument of *ja*, usually the content proposition expressed in the vP of a declarative clause:

- (1) a.  $\llbracket \lambda p. \mathbf{ja}(p) \rrbracket^c$  = that function  $f \in \{f | f : D_{\langle s, t \rangle} \mapsto D_{\langle s, u \rangle}\}$  such that  $f(p)(w) = \checkmark$ , if  $c_S$  believes that  $p$  is common knowledge of  $c_S$  and  $c_H$  in  $w$ , or that it is verifiable on the spot that  $p$ , else  $f(p)(w) = \checkmark$ . (cf. Gutzmann 2009: 53 [9])
- b.  $\llbracket \text{David ist ja ein Zombie} \rrbracket = \langle 1, \checkmark \rangle$ , if it is true that David is a zombie and if  $c_S$  believes that it is common knowledge that David is a zombie.

Similar intuitions have been expressed by Zeevat (2004: 181–182 [25]) – “*ja* presents [*p*] as common ground between speaker and hearer” – and Kratzer & Matthewson (2009: 6 [16]) –

<sup>2</sup> ‘Embedded’ is used as an umbrella term for all ‘subordinate’ constructions, semantically and syntactically ‘integrated’ ones (cf. Potts 2005 [19]), e.g. restrictive relatives, as well as their ‘unintegrated’ counterparts.

the speaker “takes p to be an established fact”. But as (2) proves, “repeating old information is not useful by itself” (Zeevat 2004: 181 [25]): p being shared knowledge is insufficient to make *ja*(p) felicitous:

- (2) At the bus stop, Anna meets a new neighbor, Bela, who is holding by the leash what is obviously his dog.  
 Bela: *Das ist ja mein Hund.*  
 ‘This [JA] is my dog.’  
 Anna: ... (*ja und*)?  
           yes and  
           ‘... (so what)?’  
 Bela: a. #  $\emptyset$   
        b.  $\checkmark$  ‘Do I need a bus ticket for him?’

Bela’s *ja*-assertion that the dog is his will leave Anna puzzled (2a) unless it supplements a second context update, e.g. Bela’s question if a bus ticket is needed for the dog (2b; cf. Viesel, to appear [24]).<sup>3</sup> As to the necessity for p to comply with (1), cf. (3):

- (3) Anna: ‘I have not heard of lonesome Cedrick in ten years. What about you?’  
 Bela: *Also – Cedrick hat ja vor fünf Jahren Didi geheiratet,*  
        ‘Well – Cedrick [JA] married Didi five years ago,  
        *und jetzt haben sie schon zwei Kinder und wohnen in einer Kommune!*  
        and now they have two children already and live in a commune!’

Bela uses *ja* in (3) even though he knows Anna not to know p. The effect is that Anna will not mistake p for a complete answer to her question. The *ja*-assertion does not convey Bela’s main point, but merely provides the background for what is to come. Thus, Anna is less likely to interrupt him at the first piece of joyous news.

Of course, the use of *ja* in contexts in which it is obvious to all that p is hearer-new is rather exceptional.<sup>4</sup> But it shows that speakers may use *ja* even if they know the addressee not to know p. Refraining, therefore, from an attempt to classify *ja*-marked propositions as CG or established information, what can be maintained is that the speaker “doesn’t consider the question whether or not p to be an issue for either the current or any future inquiry” (Kratzer & Matthewson 2009: 6 [16]). This is our first general conclusion and a significant specification of (1): a *ja*-assertion does not answer to the current QuD.<sup>5</sup>

This is precisely the reason why the felicity of *ja*(p) hinges on the second semantic argument of *ja*, q, which does not feature in (1) at all. Both q and the relation between p and q (pRq) are notoriously hard to characterize. In Kratzer & Matthewson’s (2009: 8 [16]) terms, “there must always be some suitable connection to another salient fact”. Similarly, in light of classic constellations such as (4), it is tempting to suggest that p “serve[s] as background for the

<sup>3</sup> Note that in the absence of *ja*, Anna would take the introduction of the dog as Bela’s main point and proceed accordingly:

(i) Bela: *Das ist mein Hund.*  
 Anna: ‘He’s cute.’

<sup>4</sup> However, cf. Viesel (to appear [24]) for remarks on a use of the DiP as an argumentative trick.

<sup>5</sup> Along with both Zeevat (2006 [26]) and Hinterhölzl & Krifka (2013 [11]), the present analysis rejects the idea that information under DiPs may be presupposed or have to be accommodated despite being provided in the form of an assertion. The presuppositional flavor associated with such assertions is a by-product of the function of *ja*, according to which p is added to the CG without discussion (if it is not already there anyway).

evaluation of the proposition [q] that is to be put on the table and that actually is at-issue<sup>6</sup> [at a specific point in the discourse]” (Hinterhölzl & Krifka 2013: 12 [11]):

- (4) *Die Schere ist ja rund (wie Sie sehen). Sie ist für Kinder geeignet.*  
 ‘The scissors [JA] are blunt (as you can see). They are suitable for children.’

Here, proposition p (*The scissors are blunt*) incidentally adheres to the definition in (1), but, what is more, it appears to supplement the associated utterance. Based on both Kratzer & Matthewson’s (2009: 8 [16]) and Hinterhölzl & Krifka’s (2013 [11]) descriptions, the “salient fact” q, itself to be evaluated in light of p and ‘at-issue in the current discourse’, would be the proposition that the scissors are suitable for children. In the style of Egg (2012 [5], on *schon*, *doch* and *auch*), *ja* might then be assumed to indicate a relation between two content propositions in terms of defeasible inference:

- (5) Preliminarily:  
 $\llbracket ja \rrbracket(p)(q)$  iff  $p$  and  $q$  are true,  $p$  is not used to answer to the QuD, and  $p$  defeasibly entails  $q$  ( $p > q$ ).

However, an entailment relation as in (4) is absent in (6) and (7):

- (6) *Die Schere ist ja rund (wie Sie sehen). Trotzdem ist sie für Kinder ungeeignet.*  
 ‘The scissors [JA] are blunt (as you can see). Nevertheless they are unsuitable for children.’
- (7) After TV footage just showed the winning couple, a reporter is interviewing a witness on a dance competition.  
 Reporter: ‘What colors were in fashion this year?’  
 Witness: *Naja, das Gewinnerpärchen war ja dunkel gekleidet,*  
 ‘Well, the winning couple [JA] was dressed in dark colors,  
*bei den neuen Paaren waren Herbstfarben beliebt, [...].*  
 among the new couples, fall colors were popular, [...].’

The relation between (the content propositions)  $p$  and  $q$  is the exact opposite in (4) and (6) –  $p > q$  vs.  $p > \neg q$  in the concessive case. In (7), no entailment relation whatsoever holds between the content propositions  $p$  and  $q$ . Finally, recall that in (2b),  $p$  justifies the speaker to ask a question.

It is worth comparing *ja* to *then*. Modulo general differences between DiPs and discourse markers and the fact that the first and second arguments of the two lexical items swap roles, the relations the items establish between context updates are much alike. According to Biezma (2014: 373 [3]), “*then* requires that two propositions enter into a ‘causal explanatory claim’-relation in which one (the antecedent) provides the ‘reasons’ for the other (the consequent).” These propositions need not be content propositions: *then* “signals that the utterance of the embedded clause is in some sense motivated by the preceding discourse move” (Biezma 2014: 380 [3]). Similarly, *ja* signals that the content proposition  $p$  of the embedded clause in some sense motivates another discourse move.

This allows for a revision of (5), cf. (8). By the definition suggested,  $q$  is not a content proposition and, by nature, not put on the table or under discussion. Rather than allowing for

<sup>6</sup> The latter point helps to grasp most cases, like (4), although actually, a *ja*-utterance can be used to provide support for, say, another *ja*-utterance. It is not necessary that the associated context update addresses the QuD (i.e. “is at-issue” in the discourse). This minor point may be made without illustration, as  $q$  will be argued not to coincide with the content proposition of the associated context update anyway.

q to be either a content proposition or something else, (8) generalizes over all cases without recourse to relations that may or may not hold between content propositions:

- (8)  $\llbracket ja \rrbracket(p)(q)$  iff  $p$  is true,  $p$  is not used to answer to the QuD, and  $p$  explains  $q$ , where  $q$  is the proposition that **the speaker asks a question or makes an assertion or a request**.

Thus, under *ja*, content proposition  $p$  justifies that another context update is made, be it an assertion, question or request.<sup>7</sup> To illustrate, (4), (6), (7) and (2) can be roughly paraphrased in a completely parallel fashion as in (9):

- (9) a. Since (unquestionably) the scissors are blunt, **the speaker asserts** that they are suitable for children / nevertheless unsuitable for children. (cf. (4), (6))  
 b. Since (unquestionably) the winning couple was dressed in dark colors, **the speaker asserts** that among the new couples, fall colors were popular. (cf. (7))  
 c. Since (unquestionably) the dog is the speaker's, **the speaker asks** whether a bus ticket is required for the dog. (cf. (2))

The matter of causal explanations or explanatory claims is complicated (cf. the discussion in Biezma (2014 [3])). A final analysis of pRq along the lines of (9) will depend on the definition of the discourse relation *Explanation*. But the discourse function of *ja* clearly pertains to this area of research, so that pRq as specified above can for instance be shown to correspond to an extent to a suggestion by Lascarides & Asher (1991: 58 [17]), according to whom the relation *Explanation* normally holds if  $p$  causes  $q$ :

- (10) a. **Explanation:**  $\langle \alpha, \beta \rangle \wedge \text{cause}(me(\beta), me(\alpha)) > \text{Explanation}(\alpha, \beta)$   
 b. In words, if  $\alpha$  and  $\beta$  are discourse-related and the event described in  $\beta$  caused the event described in  $\alpha$ , then *Explanation*( $\alpha, \beta$ ) normally holds.

Following (8), *ja*, just like *then* (cf. Biezma 2014 [3]), relates propositions and not events. But if in (10),  $me(\beta)$  and  $me(\alpha)$ , the ‘main eventualities’ described by propositions (Lascarides & Asher 1991 [17]), are replaced by the context updates in which  $ja(p)$  ( $\beta$ ) and  $q$  ( $\alpha$ ) are introduced, then the first arguably causes the second, so that the fact that the winning couple was unquestionably dressed in dark colors in (9b) explains that the speaker asserts that among the new couples, fall colors were popular.

Even if the argumentation so far needs refinement, the present proposal agrees with Rojas-Esponda (2013: 131 [22]), who considers *ja* one of the ‘roadsigns of communication’ which “speakers can use to signal their views and preferences about the QUDs”. The present account has argued that *ja* indicates information to justify another utterance. Therefore, the fact that  $ja(p)$  does not answer to the QuD is not “informative in itself”, and *ja* does contribute to discourse-level semantics, contrary to Egg (2012: 299-300 [5]). The difficulties in unifying *ja* with the other members of its class apparently arise from a meaning that seems “relatively unspecific” (Zimmermann 2011: 2012 [27]), but only as long as just the first argument of the DiP is considered.

<sup>7</sup> For the sake of completeness, an imperative case:

(i) *Frag einfach Norman! Lena ist ja grad nicht da.*  
 ‘Just ask Norman! Lena [JA] is not available right now.’

### 3 Embedded *ja* and discourse structure

Why is *ja* so rare in some embedded environments? Since the DiP occasionally does show up in unpredicted places, this cannot be fully explained by structural difference in the CP-system of subordinate clauses or hinge on the presence of illocutionary operators in, e.g., central ACs and restrictive modifiers as opposed to their peripheral and non-restrictive counterparts.<sup>8</sup>

So far, the present account is in line with recent research by Jacobs (2015 [12]). He proposes three contextual restrictions for *ja*, of which only one will be addressed in greater detail below. First, *ja* is banned from non-veridical environments. This restriction seems to hold apart from some quirky occurrences of *ja* in event-conditionals, showing just how fuzzy the boundaries of acceptability really are.<sup>9</sup> Second, *ja* is banned if *p* is activated. This restriction has to be evaluated for its interaction with information structure in future research. Third, Jacobs claims *ja* to be banned from appearing, syntactically, in the scope of descriptive operators because it is not in their scope semantically.

Jacobs' (2015 [12]) ban of *ja* from the scope of descriptive operators is argued to hold for cases of *ja* scoping over (the base positions of) quantifier-bound pronouns supposedly causing intervention effects (Kratzer 1999 [15]), restrictive RCs, and, e.g., temporal ACs. These are analyzed as containing a time variable bound by a definiteness operator scoping over the DiP. But even though *ja* is not 'scoped out' by such operators, it may materialize in a position in their scope domain:

- (11) a. *sagen will keiner<sub>[i]</sub> was, weil er<sub>[i]</sub> **ja** <sub>[t<sub>i</sub>]</sub> **die Jäger selber kennt.***  
 'nobody wants to say anything because [JA] he knows the hunters himself.'  
 (<http://www.griechenland-blog.gr/2013/12/allgemeines-jagdverbot-in-griechenland/79429/>, 11/26/2015)
- b. *Mit Herrn K. bekommt die Firma einen Angestellten, **der ja immer pünktlich ist.*** (cf. Viesel, to appear [24])  
 'With Mr. K., the firm gets an employee who [JA] is always on time.'
- c. *ist es ihm einfach egal, weil er eh der "letzte" Jedi ist bevor **er ja die Akademie auf Yavin eröffnet?***<sup>10</sup>  
 'does it just not matter to him because he is anyway the "last" Jedi before [JA] he opens the academy on Yavin?'  
 (<http://phoenix-hort.de/joomla/component/kunena/26-taverne/58761-aw-luke-bricht-den-codex>, 03/31/2015)

Whatever the details<sup>11</sup>, in all cases, the scope of the DiP is restricted to the content proposition of the containing subordinate clause (or to the information that a discourse referent has the

<sup>8</sup> As Jacobs (2015: 5 [12]) points out, the assumption of licensing illocutionary elements would lead to an inflation of structural ambiguities which are nevertheless context-dependent. Moreover, it is empirically implausible, too, that a language like German, while distinguishing by means of surface features over 30 conventional combinations of sentence form and illocutionary type in main clauses, should not once mark overtly whether countless numbers of embedded clauses and APs even have a defined illocutionary type at all.

<sup>9</sup> (i) *Falls **man ja wirklich mal unnötige Dinge schon länger mit sich rumschleppt** lohnt es sich zwischendurch mal ein Paket nach Hause zu schicken.*  
 'In case [JA] one really has lugged around unnecessary things for a while it is worth sending a parcel home intermittently.'  
 (<http://weltreise-info.de/forum/index.php?topic=1936.0>, 03/31/2015)

Space forbids to do the finding justice.

<sup>10</sup> The potential scope domains of *ja* are indicated in boldface. Recall that scrambled elements are interpreted in their base positions below the DiP. The position of '[JA]' in the translations is intended to capture this fact best possible.

<sup>11</sup> Additional factors influence the acceptability of *ja*. E.g. restrictive modifiers (11b) may only contain

properties denoted by the AP and NP). Accordingly, the illocutionary force of the embedding (matrix) clause does not matter. (11) also shows that it is as yet unclear why especially *ja* is very rare in certain environments.

Plausibly, certain syntactic environments are just very frequent in contexts incompatible with the specific meaning of this particle. As specified in section 2, *ja* marks information which does not answer to the QuD. Indeed, the DiP cannot be used in the answer to a corresponding question. This major limitation of its host's employment options is an idiosyncrasy of *ja* not shared for instance by *doch* although the two are close in meaning (cf. Grosz 2014 [7]):

- (12) Anna: Where is Constantin?  
 Bela: *Er ist (\*ja/✓doch) in Delhi.*  
 'He ([JA]/[DOCH]) is in Delhi.'

In a question-based discourse-model (cf. Roberts 2012 [21]), this explains naturally why *ja* is so rarely encountered in complement clauses, central ACs and restrictive modifiers. In (13), information in the potential scope of *ja* answers to the QuD, *ja* is out:

- (13) a. [...] *das sind Menschen wie wir.* (Die Zeit, 12/30/2014)  
 'these are people like us.'  
 (QuD: What about people like us? Subquestion: What about one such person?)  
*Wir bringen unser Geld zu einem Mann, der [\*ja] grüne Wollpullover trägt.*  
 'We take our money to a man who [JA] wears green woolen pullovers.'  
 b. Anna: 'What do you know about the main suspect?'  
 Bela: *Wir wissen dass er (\*ja) grüne Wollpullover trägt.*  
 'We know (that) [JA] he wears green woolen pullovers.'

Thus there is a good pragmatic reason why *ja* might be illicit in most restrictive subordinate constructions, as opposed to supplementary constructions of the CI type that are generally taken to be semantically and syntactically non-integrated. However, in the right contexts, information in restrictive subordinate clauses merely supplements the matrix assertion or question, which itself answers or comprises the QuD. The lexical content *p* could be taken away and asserted in isolation, and the containing utterance would still be informative with the dependent clause replaced by an anaphor, contrary to the situation in (13). This is illustrated in (14a), where *ja* appears in a factive clause:

- (14) a. *Haben sie erkannt, daß sie ja auf genau der gleichen Linie liegen? Weit gefehlt!*  
 'Have they realized that [JA] they are exactly on the same page? Far from it!' ([http://bitflow.dyndns.org/german/FranzGrafStuhlhofer/Das\\_Ende\\_Naht.html](http://bitflow.dyndns.org/german/FranzGrafStuhlhofer/Das_Ende_Naht.html), 03/14/2015)

the DiP in DPs with specific reference, and different adverbs (*leider* – 'unfortunately', *immer* – 'always', ...) improve the DiP's acceptability. The acceptability of *ja* in very marked places, e.g. between prepositions and determiners, or in DPs without adnominal modifiers, depends on being accompanied by other DiPs and adverbs:

- (i) [*die Krise.* ...] *diese ja auch fast Auflösung der Band*  
 ['the crisis. ...] this [JA] [AUCH] nearly dissolution the.GEN band'  
 (<http://www.arte.tv/de/ja-panik-sind-die-laessigsten-poptheoretiker-der-berliner-indieszene/7825136,CmC=7822214.html>, 08/29/2014)  
 (ii) *nach ja auch wieder der internationalen Einbindung* (Berliner Zeitung, 07/31/2004)  
 'after [JA] also again the international involvement'

- b. *Sie liegen ja auf genau der gleichen Linie. Haben sie das erkannt? Weit gefehlt!*  
 ‘They [JA] are exactly on the same page. Have they realized that? Far from it!’
- c. Since (unquestionably) they are exactly on the same page, the speaker asks whether they have realized that.

According to Hinterhölzl & Krifka (2013: 12 [11]), central adverbials and restrictive modifiers may occur in a “non-default use”, contributing ‘background assertions’, the content propositions of which are “directly added to the CG without discussion (without being put on the table [cf. Farkas & Bruce 2009 [6]])”. Background-asserted information is “needed for evaluating the assertion of the main clause” (Hinterhölzl & Krifka 2013: 12 [11]) – a question in (14a) – with the assertiveness of the dependent clause being accompanied by focus and focus particles.

There is independent evidence from phonological research that information that provides “an answer [...] to a supplemental question [to the immediate QUD]” (Riester & Baumann 2013: 233 [20]) is indeed prominent. For instance, factives as in (15) may be “not marked by means of a nuclear pitch accent but by some pre- oder postnuclear prominence” indicative of a ‘secondary’ focus (Riester & Baumann 2013: 217 [20]):

- (15) ‘Everyone knew that Mary only eats VEgetables<sub>F1</sub>. If even PAUL<sub>F2</sub> knew that Mary only eats VEgetables<sub>SOF</sub>, then he should have suggested a different restaurant.’<sup>12</sup>

Instances of capitalization in informal written German show how some speakers implement focus to enforce the background-assertive reading for the integrated clause under *ja*:

- (16) *Aber seit er ja nun sich ÜBERALL hochzieht, warte ich nur auf den Moment, wo er den Wasserhahn in der Wanne aufdreht.* (original capitalization)  
 ‘But ever since [JA] he now pulls himself up EVERYWHERE, Im only waiting for the moment where he runs the water tap in the bathtub.’  
 (<http://www.babyforum.de/threads/1214818-43269829432698294326-maerzbabys-2014-43269829432698294326/page798?p=8770370#post8770370>, 03/31/2015)

Moreover, a 2014 corpus study conducted in the DWDS (‘Digital Dictionary of the German Language’, cf. Klein & Geyken 2010 [13]) has shown APs with *ja* to be almost always lexically and structurally complex.<sup>13</sup> DPs with a single simple, non-modified adjective under *ja* are judged inelegant to unacceptable in isolation – a problem for the common view that any non-restrictive adjective could license DiPs. But exceptional cases are found (3.3% of corpus findings) and are perfectly fine in the right context when heavily stressed, as in (17b):

- (17) a. *Neulich habe ich meinen ja \*(schwer)reichen Onkel gesehen.* (constructed)  
 recently have I my JA (heavily)rich uncle seen
- b. *Könnte es sein, dass die an den ja giftigen Blättern gestorben sind?*  
 ‘Could it be that they died from the [JA] poisonous leaves?’  
 (<http://www.koi-live.de/viewtopic.php?t=36499&sid=3f8195eed3ae23e0edec30c5ca98c7b2>, 03/29/2015)

<sup>12</sup> Cf. Riester & Baumann (2013: 217 [20]) for discussion of their example (15) and the literature on ‘second occurrence focus’ (SOF).

<sup>13</sup> Cf. Viesel (to appear [24]). The reasons are unclear and could be of structural or pragmatic nature, e.g. to prevent a simple attributive reading by enforcing a clausal/predicational structure or to maximize activation.



In (17b), the causal relation between the dying event and the leaves is itself currently under discussion, and *p* is the information that the leaves are poisonous. An intonation where the adjective receives more than regular phrase stress suggests itself (a ‘not-at-issue focus’, Arndt Riester, p.c.). Similarly, *ja* is fine with simple adjectives in contrastive focus. Finally, some speakers implement marked intonation by making creative use of capital letters, hyphens, commas and brackets in the adjectival domain.

In sum, *ja* can appear in genuinely embedded non-root constructions as long as it relates pieces of information as in section 2. It is not banned from any syntactic environment even though it is not semantically embeddable under descriptive operators. But much positive evidence indicates that the right environment for the DiP is distinguished information-structurally. If the DiP’s immediate host lacks root properties, focus is the last remaining indicator of the additional supplementary discourse function of *p*.

## 4 Conclusions

The DiP *ja* has been argued to fulfill a very specific and clearly relational discourse function. Prototypically, the two propositions related are associated with two independent utterances. The content proposition of a *ja*-assertion is not directly relevant to the QuD but justifies another assertion, question or request. In restrictive modifiers, central adverbials, factive clauses and many more environments, the DiP is rare, but not impossible. Its use is dependent on a discourse relation between pieces of information, just as with *ja* in root clauses, and whenever such a relation is expressed, the independent discourse status of *p* is reflected information-structurally.

While it is too early to speculate about *ja* being conventionally focus sensitive in the sense of Beaver & Clark (2008 [2]), efforts must be taken to further elucidate the relation between focus and *ja*. Earlier statements expressly denying the focus sensitivity of this DiP must be handled with care (e.g. Grosz 2014 [7]<sup>14</sup>). The DiP patterns with other members of its class regarding its relational discourse function, and difficulties in embedding *ja* have been reduced to its specific meaning instead of peculiarly strict grammatical requirements. If in the end *ja* should prove to be focus-sensitive, this would only further unify the item and other notorious members of its class which have been argued to display (conventional) focus sensitivity (e.g. Egg 2012 [5] on *schon*, Grosz to appear [8] on *doch*, Mursell 2013 [18] on *wohl*).

## References

- [1] Josef Bayer. From modal particle to interrogative marker: A study of German ‘denn’. In Laura Brugé, Anna Cardinaletti, Giuliana Giusti, Nicola Munaro, and Cecilia Poletto, editors, *Functional Heads*, volume 7 of *Oxford studies in comparative syntax*, pages 13–28. Oxford University Press, 2012.
- [2] David I. Beaver and Brady Clark. *Sense and Sensitivity: How Focus Determines Meaning*, volume 5 of *Explorations in semantics*. Blackwell, Malden, 2008.
- [3] Maria Biezma. The grammar of discourse: The case of ‘then’. In *Proceedings of SALT 24*, pages 373–394, New York, 2014.
- [4] Marco Coniglio. *Die Syntax der deutschen Modalpartikeln: Ihre Distribution und Lizenzierung in Haupt- und Nebensätzen*. PhD thesis, University of Venice, 2008.
- [5] Markus Egg. Discourse particles at the semantics-pragmatics interface. In Werner Abraham and Elisabeth Leiss, editors, *Modality and Theory of Mind*, pages 297–333. Gruyter, Berlin, 2012.

---

<sup>14</sup> I thank Patrick Grosz for a recent discussion of this issue.

- [6] Donka F. Farkas and Kim B. Bruce. On reacting to assertions and polar questions. 2009.
- [7] Patrick Grosz. German 'doch': An element that triggers a contrast presupposition. In *Proceedings of the Chicago Linguistic Society 46*, pages 163–177, University of Chicago, 2014.
- [8] Patrick Grosz. Information structure and discourse particles. In Caroline Féry and Shin Ishihara, editors, *OUP Handbook of Information Structure*. Oxford University Press, Oxford, to appear.
- [9] Daniel Gutzmann. Hybrid semantics for modal particles. *Sprache und Datenverarbeitung*, 33(1-2):45–59, 2009.
- [10] Liliane Haegeman. Anchoring to speaker, adverbial clauses and the structure of CP. *Georgetown University Working Papers in Theoretical Linguistics*, 2:117–180, 2002.
- [11] Roland Hinterhölzl and Manfred Krifka. Modal particles in adverbial and adnominal clauses: Ms., Università Ca'Foscari Venezia, Humboldt-Universität Berlin. Ms., Università Ca'Foscari Venezia, Humboldt-Universität Berlin, 2013.
- [12] Joachim Jacobs. Deutsche Modalpartikeln als Hauptsatzphänomene: Handout, Universität Konstanz, 04.06.2015.
- [13] Wolfgang Klein and Alexander Geyken. Das Digitale Wörterbuch der Deutschen Sprache (DWDS). *Lexicographica: International Annual for Lexicography*, 26:79–96, 2010.
- [14] Angelika Kratzer. Interpreting focus: Presupposed or expressive meanings? A comment on Geurts and van der Sandt. *Theoretical Linguistics*, 30:123–136, 2004.
- [15] Angelika Kratzer. Beyond 'Oops' and 'Ouch': How descriptive and expressive meaning interact: Handout, Cornell Conference on Theories of Context Dependency, 26.03.1999.
- [16] Angelika Kratzer and Lisa Matthewson. Anatomy of two discourse particles: Handout, SULA 5, 15.-17.05.2009.
- [17] Alex Lascarides and Nicholas Asher. Discourse relations and defeasible knowledge. *Proceedings of the 29th Annual Meeting of the Association for Computational Linguistics*, pages 55–63, 1991.
- [18] Johannes Mursell. Discourse particles and their interactions in the clause: Presentation, Wien, 02.10.2013.
- [19] Christopher Potts. *The Logic of Conventional Implicatures*. Oxford University Press, Oxford, 2005.
- [20] Arndt Riester and Stefan Baumann. Focus triggers and focus types from a corpus perspective. *Dialogue and Discourse*, 4(2):215–248, 2013.
- [21] Craige Roberts. Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics*, 5(6):1–69, 2012.
- [22] Tania Rojas-Esponda. The roadsigns of communication. In Raquel Fernández and Amy Isard, editors, *SEMDIAL 2013 DialDam*, pages 131–139, Amsterdam, 2013.
- [23] Maria Thurmair. *Modalpartikeln und ihre Kombinationen*, volume 223 of *Linguistische Arbeiten*. Niemeyer, Tübingen, 1989.
- [24] Yvonne Viesel. Discourse particles 'embedded': German 'ja' in adjectival phrases. In Josef Bayer and Volker Struckmeier, editors, *Discourse Particles*, *Linguistische Arbeiten*. Gruyter, Berlin, to appear.
- [25] Henk Zeevat. Particles: Presupposition triggers, context markers or speech act markers. In Reinhard Blutner and Henk Zeevat, editors, *Optimality Theory and Pragmatics*, *Palgrave studies in pragmatics, language and cognition*, pages 163–199. Palgrave Macmillan, Basingstoke, 2004.
- [26] Henk Zeevat. A dynamic approach to discourse particles. In Kerstin Fischer, editor, *Approaches to Discourse Particles*, pages 133–148. Elsevier, Amsterdam, 2006.
- [27] Malte Zimmermann. Discourse particles. In Claudia Maienborn, Klaus von Heusinger, and Paul Portner, editors, *Semantics: Volume 1*, volume 33.1 of *Handbücher zur Sprach- und Kommunikationswissenschaft*, pages 2011–2038. Gruyter, Berlin, 2011.