

‘Integrated’ and ‘Non-Integrated’ Left-peripheral Elements in German and English*

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Abstract

In this paper, we investigate two pairs of structures in German and English: German Weak Pronoun Left Dislocation and English Topicalization, on the one hand, and German and English Hanging Topic Left Dislocation, on the other. We review the prosodic, lexical, syntactic, and discourse evidence that places the former two structures into one class and the latter two into another, taking this evidence to show that dislocates in the former class are syntactically integrated into their ‘host’ sentences while those in the latter class are not. From there, we show that the most straightforward way to account for this difference in ‘integration’ is to take the dislocates in the latter structures to be ‘orphans’, phrases that are syntactically independent of the phrases with which they are associated, providing additional empirical and theoretical support for this analysis — which, we point out, has a number of antecedents in the literature.

1 Introduction

In recent years, there has been a great deal of interest in the syntactic, semantic, and discourse properties of the sentence’s left periphery; yet a truly compelling analysis of the different structures associated with this domain remains elusive. One particularly puzzling set of structures consists of those that contain sentence-initial elements considered in some sense to be the

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‘topics’¹ of the sentences in which they occur. Although various structures of this kind have been recognized across languages, we shall be concerned with two broad classes into which they are commonly organized, respectively characterized by sentence-initial elements that are more and less integrated into the sentence — what we mean by ‘integrated’ to become clearer as we proceed. Members of these two classes in German and English, the two languages that we shall be focussing on in this paper, are illustrated in the pairs of sentences in (1) and (2), respectively:

- (1) a. Den Hans, den mag jeder.
the-ACC Hans him like everyone
 ‘Hans, everyone likes him.’
 b. Hans, everyone likes.²
- (2) a. Den/Der Hans, jeder mag ihn
the-ACC/NOM Hans everyone likes him
 ‘Hans, everyone likes him.’
 b. Hans, everyone likes him.

At first blush, the members of these two classes — which we shall henceforth be referring to as I- and N-classes, respectively, as a mnemonic for ‘integrated’ and ‘non-integrated’ — appear to be very similar cross-linguistically. However, significant differences between them were recognized early on in generative research, the differences in question generally related to the status of sentence-initial elements as either moved to or base-generated in left-peripheral positions (e.g., Rodman 1974; Vat 1981). This ‘movement versus base generation’ dichotomy still figures in much work on the subject (e.g., Grewendorf 2002; Grohmann 2003), although other work has described the dichotomy somewhat differently, taking the key difference between the two classes to be the higher or lower position that the dislocate occupies, both positions being either base positions (e.g., Anagnostopoulou 1997) or derived ones (e.g., Boeckx 2003; Boeckx and Grohmann 2003).

Interestingly, another description of these two classes has long coexisted with these more standard approaches, although figuring less prominently in the literature. This description, which we shall be investigating in detail

¹ Note that it was already recognized by Cinque (1983 [1997: 94]) that the use of the term ‘topic’ for these structures was ‘perhaps somewhat misleading’. We shall be investigating the applicability of this notion to these structures in the text below.

² In ‘topicalization’ structures like this one, we shall be following standard practice and indicating a comma between the left-peripheral element and the rest of this sentence, although there seems no reason to believe that the left-peripheral element here is actually set off from the rest of the sentence by a pause — a point we shall be returning to in the text.

below, is one according to which the relation between the left-peripheral element and its 'host' sentence can be characterized in terms of principles of narrow syntax in I-class but not in N-class structures. More specifically, left-peripheral elements in the former structures are seen to be syntactically integrated into the sentence; whereas those in the latter are, in Haegeman's (1991) terminology, 'orphans', independent of the host sentence and integrated into it by non-syntactic means (e.g., Cardinaletti 1987; Cinque 1983; Hoekstra 1999; Zaenen 1997). While such a view may sound unorthodox in the context of alternative 'narrow syntactic' analyses, it not only provides a straightforward account of a range of syntactic, semantic, prosodic, and discourse contrasts between I- and N-class structures, but also highlights intriguing parallels, not commonly noted, between the dislocates of N-class structures and such elements as discourse adverbials, non-restrictive modifiers, parenthetical expressions, and vocatives, all of these widely regarded as not combining compositionally with the phrases they are associated with (see, e.g., Asher 2000; Sells 1985; Heim and Kratzer 1998: 64). If none of these elements combines compositionally with their host sentences, then we need to ask why this is; and the idea that they are not, syntactically speaking, part of this sentence offers a way to answer this question. An 'orphan' analysis of N-class dislocates also points to another parallel between them and sentence 'fragments', phrases used with the force of sentences. As we shall show, this parallel is a far more natural one than that between I-class dislocates and 'fragments', as drawn by Merchant (to appear).

In what follows, we shall first lay out a range of contrasts in the syntactic and pragmatic/discourse behaviour of German and English I- and N-class structures that motivate an analysis of these structures as respectively involving the syntactic integration and non-integration of the dislocate into the host sentence (§2). While certain of these contrasts, as we shall show, turn out to be more subtle than generally recognized, they nevertheless provide strong support for the 'integrated/non-integrated' distinction that we are arguing for. In the course of these investigations, we shall also point out some intriguing contrasts between the German and English structures, which, to our knowledge, have received little attention in the literature. We shall then turn to the syntax of the I-class/N-class contrast, where we shall focus on an 'orphan' view of the latter (§3). Here we shall provide some new evidence for this view, which we shall briefly compare, on the one hand, with standard analyses of I-class structures, according to which their dislocates occupy CP or IP positions and are in a chain with resumptive elements or traces lower in the CP or IP; and, on the other hand, with other recent analyses of N-class structures, which take dislocates to be base-generated in or moved to high left-peripheral positions. Finally, we shall offer a summary and some conclusions (§4).

2 Some Differences between I- and N-class Structures

In order to begin our investigation of I- and N-class structures in German and English, we shall review some basic properties that distinguish members of each class in the two languages and also show that these structures pattern with I-class and N-class structures cross-linguistically. We shall then consider other syntactic differences between these classes that have been claimed in the literature. Of particular importance in both cases will be those contrasts taken to be evidence for or against ‘connectivity’, which Zaenen (1997: 120) defines as ‘any grammatical encoding of the within-sentence syntactic function of the constituent.’ What we shall find is that the patterns of acceptability related to these differences are, on closer inspection, rather more complex than generally acknowledged, making the presence or absence of connectivity somewhat more difficult to assess than has sometimes been acknowledged. As we shall explain, however, such complex patterns still turn out to offer good support for an I-class/N-class distinction. The same conclusion will emerge from an examination of the discourse properties of these structures.

2.1 Key Prosodic, Lexical, and Syntactic Differences

The German and English ‘topic’ structures illustrated in (1)–(2), which we repeat below, have gone under various names in the literature. Here we shall be referring to the I-class structures in (3a) and (3b) as German Weak Pronoun Left Dislocation (henceforth WPLD) and English Topicalization (henceforth TOP), respectively; and the N-class structures in (4a) and (4b) as German and English Hanging Topic Left Dislocation (henceforth HTLD), respectively:

- (3) a. GERMAN WEAK PRONOUN LEFT DISLOCATION:
 Den Hans, den mag jeder.
the-accHans him like everyone
 ‘Hans, everyone likes him.’
- b. ENGLISH TOPICALIZATION:
 Hans, everyone likes.
- (4) a. GERMAN HANGING TOPIC LEFT DISLOCATION:
 Den/Der Hans, jeder mag ihn
the-ACC/NOMHans everyone likes him
 ‘Hans, everyone likes him.’
- b. ENGLISH HANGING TOPIC:
 Hans, everyone likes him.

Since the German structures in (3)–(4) look similar on the printed page,³ it is important to recognize that these figure chiefly in spoken rather than written language and that their pronunciation is one of the chief means by which they are distinguished, the dislocate in HTLD structures forming a prosodic unit distinct from that of the rest of the sentence, and that in WPLD structures generally having progredient intonation and representing no such distinct unit (Altmann 1981).⁴ (In order to highlight this difference between German structures, we shall henceforth be making use of the notation of Altmann (1981), who indicates the WPLD pattern with ‘→’ and the HTLD pattern with ‘↓’ between dislocate and sentence.) This difference in the prosodic integration of dislocates also distinguishes English HTLD from TOP structures, and is widely observed to distinguish N-class from I-class structures cross-linguistically (e.g., Anagnostopoulou 1997: 153; Grohmann 2003: 141–142).

A second key difference between these two classes of structures in German and English is related to the properties of their resumptive elements. Resumptives in German WPLD are restricted to the class of weak *d*-pronouns, which are homophonous with definite article forms. Those in German HTLD, however, reflect a much wider range of possibilities, including definite and indefinite descriptions, and personal and demonstrative as well as *d*-pronouns. This corresponds to a widely reported cross-linguistic difference, whereby I-class resumptives commonly take the form of clitics or other weak pronouns and N-class resumptives have a wider range of forms (e.g., Cinque 1983 [1997: 96]). English HTLD can also be reliably distinguished from TOP on the basis of its resumptive element, not only because it has such an element whereas TOP does not, but also because its resumptives, like those of German HTLD, encompass a wide range of forms.

The position of the resumptive also helps us to distinguish I-class from N-class structures in German and English. In WPLD, the resumptive occupies either the *Vorfeld* position, commonly assumed to be Spec/CP, or the ‘topic’ position inside the IP (the latter to be described in more detail below); whereas in HTLD, the resumptive may occupy both these and lower positions in the tree such as the base positions of the subject or object. The resumptive in English HTLD, similarly, may occupy canonical subject or object positions.

³ Notwithstanding certain significant differences in word order and case-marking possibilities, which we shall be describing presently.

⁴ We recognize that the intonational facts are rather more complicated than we have suggested in the text, complicating some of the patterns described below, including those illustrated in (6)–(7). We can note, however, preliminary investigation of spectrograms and pitch tracks of recordings of the English sentences *Beans, I like* and *Beans, I like them* (as supplied by Charles Reiss, personal communication) indicates that the generalizations in the text represent a useful starting-point for future research.

Another difference between the two classes of structures pertains to case-marking possibilities for NP dislocates. In WPLD, the case of such a dislocate is always the same as that of the resumptive. In TOP, similarly, the case of an NP dislocate is always that expected from its grammatical function as subject or object. In contrast, the case of an NP dislocate in German HTLD may either match or mismatch that of the resumptive NP in the host sentence; and in English HTLD, the case of a pronominal dislocate, the only kind that display case marking, is always accusative regardless of the case of the resumptive NP in the host sentence (Rodman 1974 [1997: 46; 53, n. 8]).

- (5) a. WPLD:
 Den/*Der Hans, → den mag jeder.
the-nom Hans WP.him like everyone
 ‘Hans, everyone likes him.’
- b. German HTLD:
 Der Hans, ↓ jeder mag ihn
the-NOM Hans everyone likes him
 ‘Hans, everyone likes him.’
- c. English HTLD:
 Me/*I, I like booze. (Rodman 1974 [1997: 58, n. 8])

Another contrast related to ‘matching’ requirements in I-class and N-class structures involves the syntactic category and thematic and subcategorization requirements of the dislocate and the resumptive or trace in the host sentence (Cinque 1983 [1997: 101–102]). In I-class structures, these two elements must have the same category and fulfil the same requirements, whereas in N-class structures they need not, as illustrated in (6)–(7) (note that the English sentences are the translation equivalents of the German, a practice we shall be adopting wherever practicable in the following discussion):

- (6) WPLD and TOP:
 a. *London, → da möchte ich wohnen.
London there would I live
 b. *London, I would like to live.
- (7) HTLD:
 a. London, ↓ ich möchte dort wohnen.
 b. London, I would like to live there.

Interestingly, however, it is not obvious that I-class structures permit a greater range of syntactic categories for the dislocate than N-class structures, as has sometimes been claimed (Cinque 1983 [1997: 113]; see also Grohmann 2003: 167). While inspection of the German and English data

does indicate that I-class structures display a great breadth of possibilities, as shown in (8), the same breadth of possibilities appears to be available for N-class structures, as shown in (9):

(8) WPLD and TOP:

- a. Stolz auf Maria, → das soll Otto sicherlich sein.
Proud of Mary that should Otto certainly be
- a'. Proud of Mary, Otto must certainly be.
- b. In die Stadt, → dorthin ist Otto mit seinem Auto gefahren.
into the city to there is Otto with his car drove
- b'. Into the city Otto drove his car.

(9) HTLD:

- a. In Paris, ↓ ich würde dort gerne wohnen.
In Paris I would there gladly live
- a'. ?In Paris, now there I'd sure like to end up.⁵
- b. Sehr schlecht, ↓ so hat sich nur Otto benommen.
very badly so has himself only O. behaved
- b'. Very badly, that's how Otto behaved.
- c. Sorgfältig, ↓ so liest Otto wichtige Bücher.
carefully so reads O. important books
- c'. Carefully, that's how Otto reads the books.
- d. To go backward that much, a lot of guys can't do it.
 ('Jobs grow, optimism shrinks in Wisconsin', *Los Angeles Times* on-line edition, 9.8.2004)

A final key difference between I- and N-class structures in German and English pertains to island sensitivity. As illustrated in (10)–(13), the dislocates in WPLD and TOP are sensitive to islands, whereas their counterparts in German and English HTLD are not (note that a recognition of the prosodic difference between German WPLD and HTLD is crucial in establishing these contrasts):

⁵ Note that there was considerable inter-speaker variation in the judgements of this sentence.

(10) WPLD and TOP: Adjunct islands

- a. *Den Peter, → Hans geht in die Kneipe, bevor er den trifft.⁶
the Peter Hans goes to the pub before he him meets
- b. *Peter, John goes to the pub before he meets.

(11) WPLD and TOP: Complex NP islands

- a. *Peter, → Maria hasst das Gerücht, dass dem die Mafia
Peter M. hates the rumour that him the Mafia
 geholfen hat
helped has
- b. *Peter, Mary hates the rumours that the Mafia helped.

(12) HTLD: Adjunct islands

- a. Peter, ↓ Hans geht immer in die Kneipe, bevor er ihn trifft.
Peter Hans goes always to the pub before he him meets
- b. Peter, John always goes to the pub before he meets him.

(13) HTLD: Complex NP islands

- a. Peter, ↓ Maria hasst das Gerücht, dass die Mafia ihm
Peter M. hates the rumour that the Mafia him
 geholfen hat.
helped has
- b. Peter, Mary hates the rumours that the Mafia helped him.

This pattern corresponds with those observed for I- and N-class structures generally (see, e.g., Cinque 1983; Vat 1981); and, like the other patterns just described, reflects a robust difference between these structures.

2.2 Other Syntactic Contrasts

Other contrasts reported in the literature, despite being widely accepted, turn out to be less robust than those described above. One of these pertains to the possibility of referential dependencies between the dislocate and the resumptive, where the basic generalization is that the dislocate is in I-class but

⁶ We consider the sentences in (10a) and (11a) to be instances of island violations because — as shown in Frey 2004b and elsewhere and as we shall point out below — we analyse WPLD resumptives as being able to occur in the *Mittelfeld* and not just in the *Vorfeld*, as some have argued (see, e.g., Grohmann 2003). As such, a sentence like that in (i) would be unacceptable because the resumptive *den* itself has moved out of an adjunct island:

(i) *Peter, den geht Hans₁ in die Kneipe, bevor er trifft.

not N-class structures behaves ‘as if it occupied the position of the resumptive pronoun’ (Cinque 1983 [1997: 104]). This has led to a specific claim, due to Vat (1981), regarding the variable binding of left-peripheral pronouns by quantificational NPs in the host sentence: namely, that such binding is possible with I-class but not N-class structures. The kinds of sentences and judgements that motivate this claim, based on Vat 1981 [1997: 90, (60)], are illustrated below:

(14) a. WPLD:

Seine₁ Mutter, → die verehrt [jeder Junge]₁
his mother her admires every boy
 ‘His₁ mother, every boy₁ admires her.’

b. Topicalization:

His₁ mother, every boy₁ admires.

(15) HTLD:

a. *Sein₁ erster Artikel, ↓ ich glaube, dass [jeder Linguist]₁ ihn als
his first article I believe that every linguist it as
 Mißerfolg betrachten würde.
failure consider would

b. *His first article, I think every linguist would consider it a failure.

(16) HTLD:

a. *Sein Nachbar zur Linken, ↓ mit dem muss jeder Kursteilnehmer
his neighbour to-the left withhim must every participant
 die Hausaufgaben erledigen.
the homework accomplish

b. *His neighbour to the left, every participant should do his homework with him.

Vat (1981 [1997: 70, 90]) takes the unacceptability of such instances of HTLD to follow directly from the claim that the pronouns in the dislocates, which function as variables, are not in the scope of the quantificational expressions in the host sentences, on the assumption that the latter do not c-command the former at any level of representation. This view of HTLD is the standard one in the literature, the patterns of acceptability supporting it being widely accepted.

Yet, even Vat’s (1981 [1997: 70]) discussion of such examples reveals a the recognition of a certain discrepancy between prediction and observation, given both the ‘highly subtle and often murky’ facts about variable binding and the role of factors ‘which contribute to the difficulty of establishing correct judgement[s]’. Indeed, the authors’ belief that variable binding requires c-command leads them to assert that it ‘must be’ the case that the

variable binding is impossible in sentences like (15b), though admitting that the judgements supporting such a conclusion are ‘quite difficult to establish’, and to treat acceptable binding in certain HTLD structures as ‘ungrammatical but acceptable’.

As it happens, further investigation has revealed an intriguing pattern. This is that while many speakers produce very stable judgements of sentences like those in (14)–(16) consistent with Vat’s predictions — a fact which will figure in our discussion of the discourse properties of I- and N-class structures in §2.3 — we have also found speakers who accept a variable binding reading of German and English HTLD sentences. Moreover, they accept such a reading for other structures, including those in (17)–(18), in which the quantificational expression is similarly claimed not to c-command the coindexed pronoun at any level of representation or point in the derivation:

- (17) a. Ob seine₁ Freundin erscheint oder nicht, es wird doch jeder
whether his girlfriend appears or not it will every
 Typ₁ kommen.
guy come
- b. Whether his girlfriend shows up or not, every guy will be there.
- (18) a. Wenn sein₁ Chef glücklich ist, so ist jeder Angestellter₁
when his boss happy is so is every office-worker
 auch glücklich.
also happy
- b. When his₁ boss is happy, every office-worker₁ is happy too.

That certain speakers’ acceptance of variable binding in HTLD does reflect a fact, however, puzzling, about these structures is also suggested by the results in an informal study conducted by Gisbert Fanselow of about 50 linguistics students’ judgements of the four sentences in (19) (Gisbert Fanselow, personal communication):

- (19) a. Seinen₁ vierzigsten Geburtstag, den möchte kein Professor₁
his fortieth birthday it would like no professor
 alleine verbringen.
alone spend
 ‘His₁ fortieth birthday, no professor₁ wants to spend it alone.’
- b. Seinen₁ vierzigsten Geburtstag, keiner₁ möchte den alleine
his fortieth birthday no one would like it alone
 verbringen.
spend
 ‘His₁ fortieth birthday, no one₁ wants to spend it alone.’

- c. An seinem₁ vierzigsten Geburtstag, an diesem Tag weint jeder
on his fortieth birthday on this day cries every
 Linguist₁.
linguist
 ‘On his₁ fortieth birthday, every linguist₁ cries.’
- d. Apropos sein₁ vierzigster Geburtstag, ich glaube, dass jeder
as regards his fortieth birthday I think that every
 Professor₁ ihn mit einer Riesenparty begangen hat.
professor it with a huge party celebrated
 ‘As regards his₁ fortieth birthday, I think that every professor₁
 celebrates it with a huge party.’

What Fanselow found was that in addition to the 35% of subjects who responded according to the expected pattern, accepting the first two sentences and rejecting the last two, 31% of subjects accepted both the first two and the third, and 14% of subjects accepted the first two and the fourth sentence.⁷ Such patterns suggest, then, that the c-commanding of a pronoun by a coindexed quantificational expression (at a level relevant to interpretation) may be sufficient but not necessary for variable binding.

Such cases of possible variable binding without c-command also turn out to be intriguingly similar to cases of possible variable binding between sentences like those in (20), which we have found to be acceptable to speakers who accept variable binding in sentences like those in (15)–(18) and (19c, d) and unacceptable to those who do not accept the latter sentences.⁸

- (20) a. Fast jeder Stuhl, den wir gesehn haben, war echt schön.
almost every chair it we saw have was really beautiful
 Leider war er auch viel zu teuer.
unfortunately was it also much too expensive

⁷ The results described above summarize the most frequent patterns; others include the rejection of the second sentence, acceptance of all four, and missing answers.

⁸ Note that these elicit judgements somewhat differ from classic cases of anaphora in modal subordination contexts, as given in (i)–(ii), which seem generally acceptable, both in German and in English (the original English examples are from Sells 1985: 2, (5); cited in Roberts 1989: 717):

- (i) a. Jedes Schachspiel ist mit einem zusätzlichen Bauern ausgestattet. Dieser klebt an der Unterseite des Deckels.
 b. Every chess set comes with a spare pawn. It is taped to the top of the box.
- (ii) a. Jeder Reis-Bauer in Korea besitzt einen Holz-Karren. Gewöhnlich bekommt er diesen von seinem Vater.
 b. Every rice-grower in Korea owns a wooden cart. Usually he gets it from his father.

- b. Almost every chair we saw was really beautiful. It was also much too expensive.

At this stage we cannot offer any detailed account of the ability of some speakers to arrive at variable binding readings of the sentences in (15)–(18), (19c, d), and (20), and can only speculate that they may have an explanation in terms of the semantic subordination of the expression containing the variable to the expression containing the quantificational expression, which is taken to be the explanation of acceptable variable binding in classic cases of modal subordination (see, e.g., Roberts 1989).

What is also worth pointing out is that recognizing the ability of certain speakers to arrive at these readings need not lead us to abandon the variable binding criterion for distinguishing I- and N-class structures, but rather to reinterpret this criterion as indicating a direction of contrast, as follows. In line with the judgements reported above, we can take variable binding in I-class structures to be uniformly acceptable, but in N-class structures to vary considerably from speaker to speaker (and perhaps from sentence to sentence, although we have not yet subjected this claim to much scrutiny). On this view, variable binding in N-class structures would resemble those in the intersentential contexts illustrated above. We make this parallel more explicit in §3 below.

Broadly similar remarks about a direction of contrast also apply to a claim made by Altmann (1981) about parenthetical expressions in I- and N-class structures. According to Altmann, such expressions may occur between the dislocate and host sentence in German WPLD but not HTLD structures. This claim can be extended to English, where we find a similar contrast between TOP and HTLD. These patterns are illustrated with translation equivalents in German and English in (21)–(22):

- (21) a. WPLD:
 Den Peter, wie du weißt, den mag jeder.
the Peter as you know, him likes everyone.
- b. TOP:
 Peter, as you know, everyone likes.
- (22) a. German HTLD:
 *Der Peter, wie du weißt, jeder mag ihn.
the Peter as you know, everyone likes him.
- b. English HTLD:
 Peter, as you know, everyone likes him.

Much as we saw with variable binding above, further investigation of such occurrences of parentheticals reveals a more complex pattern of acceptability. In this case, the acceptability of German sentences like (22a)

increases for at least some speakers when there is a longer pause between the parenthetical and the host sentence, as suggested by the punctuation in (23):⁹

(23) Den Peter, wie du weißt — jeder mag ihn.

As for the English cases, the instances of parentheticals in TOP structures turned out to be more acceptable for some but not all of the speakers we consulted, and for those who did find the former more acceptable, the latter improved in acceptability with a greater pause between dislocate and host sentence, just as in German HTLD.

Once more, then, we find a clear direction of contrast, rather than an absolute contrast, between I-class and N-class structures, with the former structures being uniformly acceptable when the dislocate is separated from the host sentence by a parenthetical, while the latter structures vary in acceptability depending on the speaker and the degree of prosodic separation between parenthetical and host sentence. As such, this parenthetical placement criterion, like the variable binding criterion, support an I-class/N-class distinction — though in a manner less direct than generally thought, and less direct than the prosodic, lexical, and syntactic contrasts between these structures described above.

2.3 Discourse Properties of I- and N-class Structures

2.3.1 ‘Links’ and ‘Topics’

The I-class/N-class distinction is further supported by contrasts in the discourse properties of I-class and N-class structures, already noticed in early studies such as Rodman 1974 [1997: 33–34]. Rodman observed the following pattern, which showed that TOP and HTLD were not acceptable in the same contexts:

- (24) a. What can you tell me about John?
 i. John, Mary kissed.
 ii. *John, Mary kissed him.

⁹ Another complication that emerges for Altmann’s (1981) claim is that, for some speakers, both of the sentences in (i) are acceptable, even though the latter, with a nominative-marked dislocate, is clearly an instance of HTLD:

- (i) a. Den Peter, wie du weisst, den mag jeder.
 b. Der Peter, wie du weisst, den mag jeder.

This indicates that many factors — in this case, the position of the resumptive — may conspire to make the occurrence of parentheticals with German HTLD acceptable.

- b. What can you tell me about John?
 - i. Nothing. *But Bill, Mary kissed.
 - ii. Nothing. But Bill, Mary kissed him.

(Rodman 1974 [1997: 33–34], (19)–(20))

Rodman took such contrasts to provide good evidence that TOP and HTLD were structures derived by quite distinct means, rather than the latter being a ‘pronoun-leaving version’ of the former, as suggested by Ross (1967).

Significantly, we find the same pattern for WPLD and HTLD in German, highlighting the parallel between I-class and N-class structures in the two languages:

- (25) a. Was kannst du mir über Hans erzählen?
‘What can you tell me about Hans?’
 - i. Hans, → der hat Maria geküsst.
Hans he has Maria kissed
 - ii. *Hans, ↓ er hat Maria geküsst.
- b. Was kannst du mir über Hans erzählen?
 - i. Nichts. *Aber Peter, → der hat Maria geküsst.
 - ii. Nichts. Aber Peter, ↓ er hat Maria geküsst.

This contrast between I-class and N-class structures can be described with the help of Birner and Ward’s (1998: 20) notion of a ‘link’, which they describe as ‘linguistic material representing information which stands in a contextually licensed [partially ordered set] relation with information evoked in or [inferable] from the prior context, and serves as a point of connection between information presented in the current utterance and the prior context.’¹⁰ While the examples in (24)–(25) make it clear that the dislocates of both I-class and N-class structures are related to previous discourse in some fashion, it is only the former that must serve as ‘links’ to previous discourse. This is shown for German and English in Frey (to appear); the pattern is illustrated for both languages in (26):

¹⁰ Birner (2004) notes problems for a description of felicitous preposing in terms of partial ordering, given sentences like the following one (her (25a)):

- (i) We ate in a terrible French restaurant last night. #The cork was green.

Since such a relation is transitive, the preposing of *the cork* should arguably be possible, given that a cork is part of a bottle of wine and wine is always found in a French restaurant. On this basis, Birner concludes that ‘defin[ing] these linking relations as poset relations is therefore either incorrect or incomplete.’ Although this ‘transitivity problem’ does seem to be a real one, we can perhaps put it aside here without doing any real violence to our argument, and leave a more adequate treatment of ‘linking’ for future research.

- (26) Die Kinder hatten ihren ersten Ferientag und Maria hat vorgeschlagen, dass sie Fußball spielen.
 ‘It was the first day of the children’s vacation and Mary suggested that they play football.’
- a. WPLD:
 Der Otto, der wollte aber schlafen.
 ‘Otto, he just wanted to sleep.’
 - a’. TOP:
 Otto, Mary watched over closely.
 + Otto must be a member of the set of children.
 - b. German HTLD:
 Der Otto, er wollte aber schlafen.
 ‘Otto, he just wanted to sleep.’
 - b’. English HTLD:
 Otto, he just wanted to sleep.
 + Otto need not be a member of the set of children.

What we see here, in other words, is that the dislocate in the I-class structures stands in the ‘part-of’ relation to the set of children on vacation evoked in previous discourse; whereas the dislocate in the N-class structures need not stand in such a relation.

Further highlighting this difference in the ‘link’ properties of I-class and N-class structures is a contrast that, to our knowledge, has previously gone unnoticed in the literature. This is that HTLD structures can be discourse-initial (though, of course, requiring contextual support), whereas WPLD and TOP structures cannot, as suggested by the following examples:

- (28) (Pointing to a sanctimonious politician on a television programme:)
- a. That jack-ass, I heard they caught him with a prostitute.
 - b. #That jack-ass, I heard they caught with a prostitute.
- (29) (Pointing to a sanctimonious politician on a television programme:)
- a. Dieser Blödmann, ↓ man hat ihn kürzlich mit einer Prostituierten erwischt.
 - b. #Diesen Blödmann, → den hat man kürzlich mit einer Prostituierten erwischt.

The point, again, is that WPLD must be a ‘link’, whereas HTLD can, but need not, be one.

Another discourse contrast between German I-class and N-class structures, described by Frey (to appear), is perhaps even more surprising

given a widespread assumption about dislocates in both classes of structures. The assumption is that these dislocates are always topic expressions, where the referent of such an expression is understood in Reinhart's (1981) sense as what 'the sentence is used to assert something about'. (Given the various uses to which the term 'topic' has been put, we shall henceforth use the term A-topic, short for 'aboutness-topic', to identify this sense of 'topic'.) Such an assumption seems to be plausible, based, for example, on an inspection of the HTLD examples from Rodman 1974 and their German translations, as given in (24)–(25). Yet, closer inspection of these examples reveals that the kind of question with which Rodman frames these examples — 'what can you tell me about...?' — forces the answers to be about the individual identified in the question. Once one eliminates the 'aboutness-forcing effects' of these questions, however, the relation between dislocates and A-topics in I-class turns out to be different from that between dislocates and A-topics in N-class structures. As Frey shows, the dislocate and its associated resumptive in German WPLD but not HTLD structures always indicate A-topics.

Frey establishes this point by first showing that in German generally, A-topics that occur in the German *Mittelfeld* must occur higher than the base position of sentential adverbials — a position higher than that of any other element in the *Mittelfeld* (Frey 2004a). Since contexts like those supplied in Rodman's examples force an argument to an A-topic, any such A-topic occurring in the *Mittelfeld* together with a sentential adverbial must occur above this adverbial, as (30) shows:¹¹

- (30) Was kannst du mir über Hans erzählen?
 'What can you tell me about Hans?'
- a. Nächstes Jahr wird der Hans zum Glück eine reiche Frau
next year will the Hans luckily a rich woman
 heiraten.
marry
 'Next year, Hans will luckily marry a rich woman.'
- b. #Nächstes Jahr wird zum Glück der Hans eine reiche Frau heiraten.

Further support for this claim about the position of A-topics comes from the observation that non-referential NPs — which, by common assumption, cannot be A-topics — cannot occur above sentential adverbials:

¹¹ Frey's claim regarding A-topics is that there is a designated structural position for such elements in the *Mittelfeld*, inside IP. For a similar claim about Finnish, see Holmberg and Nikanne 2002.

- (31)*Während des Vortrags haben mindestens zwei leider
during the lecture have at least two unfortunately
 einen Apfel gegessen.
an apple eaten
 ‘During the lecture, at least two people, unfortunately, were eating an apple.’

If we now return to WPLD and HTLD structures, we can see that — for those speakers who have stable judgements that these structures contrast with respect to variable binding, as described in §2.2 above — resumptives in the former structures clearly behave as A-topics according to the criterion just described, making the dislocates with which they are associated A-topics also:

- (32) a. Seinem₁ besten Freund, jeder Berliner₁ wird dem zum Glück
his best friend every Berliner will him luckily
 Geld ausleihen.
money lend
 ‘His best friend, every Berliner, luckily, will lend him money.’
 b.??Seinem₁ besten Freund, jeder Berliner₁ wird zum Glück dem Geld
 ausleihen.

In contrast, resumptives in HTLD structures need neither be in ‘A-topic position’ as shown in (33a), where the resumptive *ihn* ‘him’ is clearly below the sentential adverbial *anscheinend* ‘apparently’; nor be referential expressions, as shown in (33b), where the dislocate and the resumptive associated with it have a non-specific indefinite interpretation:

- (33) a. Der Hans, heute will anscheinend keiner ihn unterstützen
the Hans today wants apparently no one him support
 ‘Hans, today no one apparently wants to support him.’
 b. Einen Mann ohne schlechtes Benehmen, Maria sucht
a man without bad attitude Mary looks for
 einen/ihn noch.
one/him still
 ‘A man without an attitude, Mary is still looking for one/him.’

The data from German thus not only indicate another striking contrast in the discourse properties of I-class and N-class structures, but also make it clear that dislocates and their associated resumptives are necessarily A-topics in I-class but not N-class structures.

Comparable data from English suggest that the A-topic property does not even hold of I-class structures generally, and certainly does not hold of N-class structures, despite the common assumption that it does (see, e.g., Frey to appear; Prince 1998). Perfectly acceptable TOP structures like those in

(34), for example, demonstrate that dislocates in the structures may be quantifier expressions and thus not A-topics:

- (34) a. At least some kinds of beans I really like.
b. Many kinds of beans I just don't like.
c. Some computations he may not be able to carry out in his head.
(Birner and Ward 1998: 80)

As for HTLD structures, the pattern here is somewhat more complex, since comparable dislocates in these structures do appear to be unacceptable, as suggested by the following sentences from Rodman 1974 [1997: 43]:

- (35) a. *Someone, he's coming.
b. *A boy, I saw him.
c. *Everybody, they're doing it.
d. *Many boys, Sarah Bernstein would like to kiss [them].
(Rodman 1974 [1997: 43, (50)])

However, such examples do not represent the full pattern, given acceptable instances of HTLD structures with quantificational dislocates such as the following ones:

- (36) a. A boy, they really want one, since they already have two girls.
b. 'Any clashes between demonstrators and counter-demonstrators, we'll try to keep those to a minimum', he said.
(*'Activists Oppose Catholic Church's Antiabortion Stance'*,
Washington Post 25.4.2004, C01)

At this stage, we can offer no detailed account of the difference between (35) and (36). However, we can speculate on its source in the relative lexical poverty of the dislocates in (35) and the lack of any context to restrict the domains that these expressions quantify over. This leads to the expectation of a non-specific reading for the resumptive, but this expectation appears to clash with salient interpretations of the host sentences, on which specific readings of the resumptives are more natural. In contrast, the sentences in (36) both have dislocates and resumptives that are non-specific, and they are all fully acceptable.

While there clearly remains much to be said about the A-topic properties of I- and N-class structures, the data just examined demonstrate quite convincingly that not all such structures require their dislocates and associated resumptives to be A-topic elements. What they also show is that there are significant cross-linguistic differences in A-topic properties even among I-class structures.

The picture of the discourse properties of I- and N-class structures that emerges from the above discussion is in an important sense similar to what we have just seen for variable binding and parenthetical placement, inasmuch as dislocates in German and English I-class structures are uniformly links and those in German I-class structures are uniformly A-topics, suggesting a necessary connection between their grammatical and discourse properties; whereas their N-class counterparts may, but need not, be links or A-topics, suggesting no such necessary connection. This is precisely the insight that we shall seek to develop in our discussion of the syntax of these two classes in §3.

2.3.2 Some Speculations about Discourse Properties and the ‘Root/Embedded’ Contrast

Before we do so, however, it might be worth noting the relevance of the respective discourse properties of I-class and N-class structures to another contrast between these structures claimed in the literature: that in their ability to occur in embedded clauses. Although this contrast has not, to our knowledge, been related to the discourse properties of such structures, these properties may very well be behind the observed patterns of embeddability.

On the standard view (e.g., Cinque 1983 [1997: 96]), the dislocate in N-class structures associates typically only with matrix clauses, whereas that in I-class structures may associate with either matrix or embedded clauses. Of course, the reference to ‘typically’ here makes this contrast a weak one, since it reflects a longstanding recognition that embedded HTLD structures are possible, if restricted.¹² Thus, alongside embedded TOP and WPLD structures such as those in (37)–(38), we find embedded HTLD structures in both English and German, the former having figured in the literature since Ross 1967:

(37) TOP:

- a. John says that Sue, Bill doesn’t like. (Authier 1992: 329, ex. 1a)
- b. It’s true that this book, he read thoroughly.
(Authier 1992: 333, ex. 8b)

¹² However, Grohmann (2003: 151), for example, denies the possibility of embedded HTLD in German (which we believe is at odds with the cases given below, at least on the assumption that these cases, which involve V2 word order in the embedded clause, are truly cases of syntactic embedding); and Anagnostopoulou (1997: 154) reports that in Greek, embedded HTLD is not possible, while embedded I-class clitic left dislocation is. As regards English, we find authors such as Anagnostopoulou (1997: 154, 167) recognizing the possibility of embedded HTLD structures but taking these to occur only in a limited range of environments, analysed as CP-recursion environments (for discussion of these environments, see Authier 1992; Iatridou and Kroch 1992).

- c. ‘They know the money they give as an incentive, they make up twentyfold,’ said Bonnie Reiss, a senior advisor to the governor. (‘Runaway Filming a Challenge for Gov.’, *Los Angeles Times* 30.9.2004)

(38) WPLD:

- a. Ich glaube, den Hans, den mag jeder
I believe the Hans him likes everyone
 ‘I think Hans, everyone likes him.’
- b. ?Peter glaubt, den Hans, dass den Maria liebt.
Peter believes the Hans that him Maria loves
 ‘Peter thinks that Hans, Maria loves him.’

(39) English HTLD:

- a. I said that my father, he was tight as a hoot-owl. (Ross 1967)
- b. John always knew that his father, he’d been a bit of a drinker.
- c. Yeah, I realized a bit too late that my father, he got in way over his head.
- d. ‘I think the general physics community, they’re a little bored with the equation,’ he said. (‘What makes an equation beautiful’, *New York Times*, online edition, 24.10.04)

(40) German HTLD:

- a. Hans glaubt, Maria, ↓ sie wird gewinnen.
Hans believes Maria she will win
 ‘Hans thinks Maria, she will win.’
- b. ?Maria weiß, Hans, ↓ Petra hat ihn geküsst.
Maria knows Hans Petra has him kissed
 ‘Maria knows that Hans, Petra kissed him.’

Moreover, as an inspection of the examples in (39) and (40) indicates, embedded HTLD does not appear to be limited to bridge verb contexts, as is sometimes claimed.

Interestingly, a certain contrast emerges between German and English here, related to the kinds of embedded clauses that may acceptably host HTLD. In English, which makes use of the same word order for both matrix and embedded clauses, we find embedded HTLD either with or without complementizers, there being no obvious contrast in the acceptability of embedded HTLD related to the syntax of the embedded clause. However, in German, which makes use of V2 word order for matrix and embedded clauses (in which case the latter have no complementizers) and V-final word order for embedded clauses only (in which case complementizers are

obligatory), we find embedded HTLD far more generally acceptable with V2 order, as in (40), than with V-final order, as in (41), many speakers judging the latter quite unacceptable, as indicated:¹³

- (41)*Hans glaubt, die Maria, ↓ dass Peter sie wirklich liebt.
Hans believes the Maria that Peter her really loves
 ‘Hans thinks that Maria, Peter really loves her.’

The V2/V-final pattern just described represents a rather puzzling difference between German and English, but one that may be related to our finding that embedded WPLD structures in German with V-final word order are likewise unacceptable for many speakers,¹⁴ with sentences like (42a) contrasting sharply with ones like (42b), as suggested by the judgements in (42):

- (42) a. Ich glaube, den Hans, → den mag jeder.
 b.??Ich glaube, den Bush, → dass den viele Deutscher nicht mögen.
I believe the Bush that him many German not like
 ‘I think that Bush, many Germans don’t like him.’

One possibility for explaining the unacceptability of (41) and (42b) for these speakers, which we can only sketch here, is to appeal to the kinds of contributions that I-class and N-class structures make to the discourse, together with the respective contributions of V2 and V-final embedded clauses. As we have seen, I-class structures in German must promote an A-topic introduced in previous discourse and I-class structures in general must contain ‘links’ to previous discourse — both ‘A-topic-promoting’ and ‘linking’ functions being typically associated with main clauses.¹⁵ Similarly,

¹³ Interestingly, some speakers did accept such sentences or even varied in their judgement of different HTLD sentences. We shall have more to say about this below.

¹⁴ The judgements reported in the text for (42) accord with those in the literature, including that of Müller and Sternefeld (1993: 488) and with, e.g., Grohmann’s (2003: 172) remark that WPLD ‘is restricted to V2 environments and as such can only be embedded under “bridge verbs” that allow such embedding’. However, we have found speakers who accept sentences like those in (38b) and (42b), indicating that a characterization of these sentences as simply ungrammatical does not tell the whole story. Although we cannot yet offer an account of the variation in speaker judgements here, there does seem to be a significant dialectal difference, with speakers of Southern German dialects accepting such structures more readily than those of Northern German dialects.

¹⁵ Cases like the following one (from Wunderlich 2003: §3), in which the non-topic expression *von Peter* in the main clause forces a coreferential element in an embedded clause to assume A-topic status, make it clear that A-topics are not restricted to main clauses as a matter of grammatical fact:

- (i) Ich glaube von Peter, dass er niemals lügt.
 ‘I believe of Peter that he never lies.’

N-class structures in both German and English serve (perhaps among other functions; see, e.g., Prince 1998) to create a significant break in discourse structure — this function again typically associated with main clauses.¹⁶ Now, various authors have suggested that the unexpected acceptability of embedded ‘topic’ and other canonically ‘root’ structures is related to the ability of these embedded structures to somehow assume ‘root’ status. According to Lasnik and Saito (1992: 193, n. 7), for example, speakers’ acceptance of embedded HTLD in English may involve their construal of the embedded clause ‘as a matrix clause in some sense’, with the actual matrix clause perhaps having an ‘adsentential’ status. Such remarks echo earlier ones by Urmson (1963: 237), who proposes that the verb *bedauern* ‘regret’ in a sentence like (43), where it takes a clause with V2 rather than the more typical V-final word order, has been ‘converted into a parenthetical verb’ (see Gärtner 2001: 127–28 for further discussion):

- (43) Ich bedauere, ich muss das hören.
I regret I must that hear
 ‘I regret (to have to inform you) that I must hear that.’

Now, the substantial research on the properties of embedded V2 and V-final clauses in German (e.g., Gärtner 2001, 2002; Meinunger 2004; Reis 1997, 1999) suggests that the former have some of the properties of V2 main clauses — in particular, the ability to convey assertions — whereas the latter generally indicate the semantic subordination of the embedded clause to the main clause. The idea, then, that both embedded WPLD and HTLD are far more natural for many speakers when the embedded clause has V2 rather than V-final word order because such V2 embedded structures are more consistent with the ‘main clause’ functions of these two structures, which are both closely implicated in a sentence’s assertion. The observation that judgements on these sentences are quite variable suggests that the association between WPLD and HTLD structures and V2 word order represents a

¹⁶ On this function, see, e.g., Frey (to appear), who shows that German HTLD but not WPLD structures create a break in the discourse, accounting for the acceptability of the continuation in (a) but not in (b) below:

- (i) Maria wird morgen mit Hans nach Paris fahren.
 ‘Maria will go to Paris with Hans tomorrow.’
- a. Der Hans, ↓ er ist sehr zerstreut in der letzter Zeit.
 the Hans he is very absent-minded lately
- b. #Den Hans, → der ist sehr zerstreut in der letzter Zeit.
 ‘Hans, he has been very absent-minded lately.’

The idea is that the HTLD structure in (a), but not the WPLD structures in (b), provides a suitable transition to a new theme, which can be integrated into a higher level of discourse that subsumes the previous sentence.

tendency, which is stronger for some speakers and can be more easily overridden by others. This alone, however, does not account for a significant asymmetry observed in the acceptability of embedded WPLD and embedded HTLD with V-final word order: namely, that speakers who accepted the former tended to reject the latter. What we can speculate here about this pattern is that it suggests that the discourse properties of HTLD are more strongly associated with main clause assertion than those of WPLD, making the former less compatible with the general subordinating function of V-final clauses. While clearly a great deal more needs to be said about how the discourse properties of I-class and N-class structures interact with the word order of embedded clauses, our brief comments suggest that this may be a promising direction for such research into the patterns given in (37)–(42).

3 Towards an Analysis of the I-class/N-class Contrast

Let us summarize the main conclusions of the previous section. Our investigation of reported contrasts between I-class and N-class structures in German and English has revealed certain of these to be spurious, but a number of them to be quite sharp. Among the latter were that I-class but not N-class structures (i) consisted of dislocates and host sentences forming a single prosodic unit; (ii) in German structures, had resumptives that were uniformly *d*-pronouns; (iii) had dislocates and resumptives that matched with respect to case-marking and syntactic category; (iv) displayed island sensitivity; (v) had uniformly available variable binding readings of pronouns in the dislocate coindexed with quantificational expressions in the host sentence; (vi) uniformly permitted parentheticals to precede the host sentence; (vii) had dislocates that were uniformly discourse links; and (viii) in German structures, had dislocates and resumptives that were uniformly A-topics. In general, then, the picture of the I-class/N-class contrast that emerged was one on which the former structures were characterized by necessary grammatical properties and behaviour, whereas the latter displayed considerable variety in such properties and behaviour. Of course, the question that now arises is how this range of contrasts can best be captured.

3.1 The Syntax of I-class Structures

One way of thinking about this contrast has been in terms of the integration of I- and N-class dislocates into their respective host sentences, as reflected in the ‘connectivity’ effects that they do or do not display, where such effects signal that the dislocates play a grammatical role within the sentence. We adopt the widely held view that these effects — in particular, case- and syntactic category-matching between dislocate and resumptive, uniform

variable binding, as described above, and island effects — demonstrate that the dislocate in I-class structures forms an A'-dependency with a theta-position inside the IP. As it happens, this dependency has been captured by two basic means in the literature: namely, by movement of the dislocate from an IP-internal to a left-peripheral position and by its base-generation in the latter position and chain formation with a theta-position.

On movement approaches, the surface position of the dislocate reflects an operation that either copies the original element in a left-peripheral position or, equivalently, moves this element and leaves behind a trace. One recent movement approach to WPLD, that of Grohmann (2003), takes the original element to be moved twice: first into an intermediate C-domain position and then into a higher position, with the copy in the intermediate position being spelled out as a resumptive pronoun. Another recent approach, traceable to Vat's (1981) 'Vergnaud-raising' analysis, posits a 'big XP' as the source of both dislocate and resumptive, with the dislocate being base-generated in a specifier-head configuration with the resumptive in a single phrase (e.g., Boeckx 2003; Grewendorf 2002; see Cecchetto and Chierchia 1999 for this approach to Italian DP clitic left dislocation, a variety of I-class structure). In this case, the whole phrase first moves to a higher sentence-internal position and then splits apart, with the dislocate moving to its final left-peripheral position and the resumptive remaining behind.

On base-generation approaches to German and English, the dislocate and the resumptive, in the case of WPLD, and an empty operator, in the case of TOP, are base-generated in distinct positions, the former in the C-domain and the latter in a θ position. The relation between the dislocate and the resumptive and its trace, in the case of WPLD, and the dislocate and the operator and its trace, in the case of TOP, is then created by chain formation (e.g., Anagnostopoulou 1997; Cinque 1983; Frey 2004b; Rizzi 1997).

While the technical details of these various proposals are quite different, each nevertheless succeeds in capturing the same 'connectivity' effects just summarized above. The key observation uniting these effects, then, is that the dislocate in I-class structures behaves as an element in the 'core' rather than the 'periphery' of the sentence, despite a surface position associated with the latter.

Although space limitations preclude further consideration of these analyses of I-class structures, what is worth briefly examining here are some interesting contrasts as well as commonalities among WPLD and TOP structures, particularly since some analyses of these structures treat them as essentially the same, modulo the presence of a resumptive in the former and an empty operator in the latter (see, e.g., Anagnostopoulou 1997: 186, n. 12 for some discussion). In fact, closer inspection reveals significant differences in the attachment site of the dislocate and thus the structure of the clause to

which the dislocate attaches. This can be seen most easily in (i) the respective positions of the complementizer in embedded WPLD and TOP structures, as shown in (44)–(45),¹⁷ where sentences like (44b) are impossible even for those who readily accept (44a); and (ii) the well-formedness of questions under the dislocate in German but not English, as shown in (46):

- (44) a. Ich glaube, den Hans, → dass den jeder mag.
 b. *Ich glaube, dass den Hans, → den jeder mag.
- (45) a. I think that John, everyone likes.
 b. *I think, John, that everyone likes.
- (46) a. Dem Hans, → würde dem wenigstens Peter Geld ausleihen?
the Hans would him at least Peter money lend
 b. *Hans, would Peter at least lend money to?

These contrasts indicate that in German but not in English, the phrase hosting the dislocate must be higher than that hosting the complementizer. One possibility consistent with this observation is that the dislocate in WPLD is base-generated in the specifier of the highest projection of the C-domain, as argued by Frey (2004c); whereas that in TOP occupies a lower (perhaps adjoined) position (e.g., Lasnik and Saito 1992: 81).¹⁸

One other observation of German and English worth making here concerns the iterability of the dislocate in I- and N-class structures. Now, it has been widely assumed since Cinque (1983) that HTLD permits ‘at most one’ dislocate, whereas clitic left-dislocation (a variety of I-class structure, as noted above) imposes ‘no (theoretical) limit’ to the number of such phrases (Cinque 1983 [1997: 96]), this difference supported by data from Italian and other languages (see, e.g., Cinque 1983; Rizzi 1997). As we shall see, this generalization also seems to be well supported by data from English, but not by those from German.

The relevant English structures support Cinque’s claim about both I-class and N-class structures. Thus, HTLD structures like that in (47a) are clearly unacceptable, contrasting sharply with sentences like that in (47b):

¹⁷ See Authier 1992: 329 for some discussion of the English facts.

¹⁸ Authier (1992: 330) takes the possibility of sentences like that in (i) to argue in favour of the possibility that topicalized elements are actually in the lower CP of a CP-recursion structure:

- (i) John swore that under no circumstances would he accept their offer.
 (based on Authier’s (4a))

Another suggestion, however, which is more in keeping with the claim made in the text is that such negative inversion structures do not involve movement into the CP, the negative elements ‘remain[ing] clause-internal’ and ‘not overtly mov[ing] as far as they would in a corresponding affirmative declarative sentence’ (Sobin 2003: 185).

- (47) a. *Me, Lenny, he's gonna go pet some bunnies and I'm gonna get my six shooter.
 b. Me and Lenny, he's gonna go pet some bunnies and I'm gonna get my six shooter. (Rodman 1974 [1997: 36–37], (30)–(31))

Moreover, such HTLD structures also contrast with acceptable TOP structures such as those in (48) (see, e.g., Culicover 1996: 452–454):

- (48) a. To that man, liberty we would never grant.
 b. Liberty, to that man we would never grant. (Culicover 1996: 453, (23a), (24a))

When we turn to German, however, we find precisely the opposite pattern, with multiple dislocates in HTLD structures being acceptable and those in WPLD structures being unacceptable, as (49a) and (49b) suggests (see, e.g., Grohmann 2003: 160):¹⁹

- (49) a. HTLD:
 Dem Alex, das Geld, du hättest es ihm nicht
the Alex the money you would.have it to.him not
 wegnehmen dürfen.
take.away may
 'To Alex, the money, you should not have taken it away from him.'
 b. WPLD:
 *[Ihrem₁ Doktorvater]₂, [ihr₁ Auto]₃, jede Studentin₁ hat dem₂
her supervisor her car every student has him
 das₃ heute gezeigt.
it today shown
 'Her supervisor, her car, every student showed it to him today.'

The inability of WPLD dislocates to iterate can be seen to provide some support for a unique specifier position for the dislocate in WPLD structures, as argued by Frey (2004c), with the (at least marginal) ability of HTLD dislocates to do so suggesting no such unique position in the C-domain. The English patterns, on the other hand, indicate no necessary connection between either class of dislocate and a unique specifier position in the C-domain. While the observed difference in the iterability of German and

¹⁹ However, Grohmann's (2003: 160) own example of an N-class structure with multiple dislocates, as given in (i), was not accepted by any of the many native speakers we consulted, and as such does not provide reliable support for this claim:

- (i) Der Alex, der Wagen, seine Mutter, gestern hat sie ihm den geschenkt.
 'The Alex, the car, his mother, yesterday she gave it to him.' (Grohmann's (59a))

English I-class dislocates might be seen to fall out of such a grammatical difference, a difference in the iterability of N-class dislocates is perhaps more surprising. It is possible, however, that this is related simply to the greater ability that German provides through its case system to relate dislocates thematically to the host sentence. Although further consideration of this possibility will have await further research, it seems consistent with the analysis of N-class structures that we shall be offering in the following section.

3.2 The Analysis of N-class Structures

3.2.1 The Basic Case for Orphans

Having sketched the standard analyses of I-class structures in German and English, we come finally to the question of how N-class structures should be analysed. The approach that we wish to defend here, as noted in the introduction, is in fact an old one, offered by many authors over the years, although figuring less prominently in recent research. Its leading idea is that the dislocates in HTLD are, syntactically speaking, independent of their host sentences, having in Haegeman's (1991) terms the status of 'orphans'; so that the relation established between the dislocate and the resumptive, and indeed between the dislocate and the host sentence more generally, is 'one of discourse grammar' (Cinque 1983 [1997: 98]). The singular virtue of such an account, as Cinque and others have noted, is that it captures in a very straightforward way the 'extra-sentential' syntactic, semantic, and discourse behaviour of HTLD dislocates, as outlined in §2. In addition, such an analysis gives substance to a clear intuitive parallel between HTLD structures and various others that have a plausible 'orphan' analysis, as we shall see.

Since Cinque's original (1983 [1997: 98–100]) remarks on this matter remain as relevant today as they were twenty years ago, they are worth close attention. Cinque points out that the absence of connectivity effects between the dislocate and resumptive — generally reaffirmed by our own consideration of these effects in §2, although with a complication regarding variable binding, as we described in this section — suggests, but does not confirm, 'that the rule responsible for the "connection" [between these elements] is not a sentence grammar rule but a principle of discourse grammar.' However, a number of observed properties of HTLD would either follow directly from or be entirely expected on such a 'discourse grammar' analysis, whereby the relation between the dislocate and resumptive is the same as that 'between a full NP and a pronominal in two adjacent sentences in discourse', as illustrated in (50):

- (50) I like *John*. I do think however that *he/that little bastard* should be quieter. (Cinque 1983 [1997: 98], (15))

More specifically, the lack of (obligatory) case-matching in HTLD would follow directly, since this is ‘just what happens between two NPs in two distinct sentences’, as would the lack of island effects, since these represent ‘a sentence grammar phenomenon.’ Similarly, the range of forms that resumptives in HTLD can assume would be expected on this ‘discourse grammar’ claim, given that such forms ‘are all permitted means of coreference across sentences’ (Cinque 1983 [1997: 98–99]). Even the typical occurrence of the dislocate in ‘in the absolute initial position’ in root contexts becomes understandable if the relation between dislocate and resumptive is one between two distinct units in a discourse. These and other considerations thus lead Cinque to the tentative conclusion that ‘HTLD is a discourse grammar phenomenon’, which he takes to be the ‘simplest possible analysis’ consistent with the data, there being ‘no reason to hypothesize anything special’ in addition to the discourse principles that govern the relations between elements across sentence boundaries (Cinque 1983 [1997: 100]). We find Cinque’s conclusion echoed, for example, by Zaenen (1997), who assumes that the dislocate in HTLD ‘is not in the same sentential domain as the rest of the sentence, and that hence the relation between it and the rest of the sentence is established in the same way as the relation between parts of separate sentence[s] is established; i.e. by anaphoric linking’ (Zaenen 1997: 121–22).

If we consider what this ‘discourse grammar’ proposal for HTLD means for the analysis of the HTLD dislocate in particular, we arrive at the proposal offered by Haegeman (1991) for other ‘non-integrated’ elements: namely, that these too are ‘orphans’, syntactically independent of their host sentences. Admittedly, such a proposal, according to which certain sentence-initial phrases are not actually part of the sentence, may seem rather obscure. Yet, there are clearly other pairs of expressions, such as the question-answer sequence in (51), that are tightly connected in a discourse but nevertheless independent units syntactically:

- (51) What do I think of John? He’s a fool.

One way to understand ‘orphans’ in minimalist terms is as expressions whose elements are the sole members of a numeration. In other words, an orphan is simply not part of the same numeration as its host sentence, much as one sentence is not in the same numeration as another one. As far as we can tell, nothing would rule out such a numeration, since the well-formedness conditions of the grammar apply not to numerations directly, but rather to the syntactic structures derived from them. The question, then, is only whether any syntactic principles in terms of which derivations are evaluated would

rule out such orphans. Here, we wish to conjecture that no such principles would do so, leaving the proof of such a conjecture for future research. What we might already observe, however, is that syntactically speaking such orphans would appear to involve straightforward merging operations, bearing a close resemblance to structures assembled in independent derivational space and subsequently merged with the rest of the sentence. The only obvious difference between these structures and orphans is that they are members of the same numerations as the other terminals in the sentence, whereas orphans are not, and so have nothing further to merge with.

Note that on this ‘orphan’ picture of HTLD dislocates, these expressions do not c-command their resumptives at any level of syntactic representation or point in a derivation. This provides us with a natural explanation of why the possibilities of variable binding between a quantificational expression in the host sentence and a pronoun dislocate bear some resemblance to the cases of intersentential variable binding given above: namely, that the absence of c-command means that other, non-syntactic, principles come to be responsible for the availability of such binding. Similar remarks apply to case mismatch between dislocate and resumptive: since on an orphan analysis of the former, these two elements are never in a structural configuration that ensures that they receive the same case, it is only the latter, as an element of the sentence, that must receive the case determined by its relation to the verb or a functional head.²⁰ Finally, the absence of island effects is entirely consistent with the orphan analysis of the dislocate, since on such an analysis — just as on standard approaches to HTLD, in which the dislocate is base-generated in a high left-peripheral position — the dislocate would never be in an A'-relation with an element inside the sentence and thus could not trigger such effects.

3.2.2 Additional Evidence for Orphans

Given the above allusion to standard approaches to HTLD, a natural question to ask about the ‘orphan’ analysis canvassed above is what distinguishes it empirically from these other approaches, according to which the dislocate, positioned high in the left periphery, is coindexed with the resumptive, occupying one of the lower positions in the sentence described above (e.g., Chomsky 1977; Grohmann 2003; Rodman 1974; Vat 1981).²¹ As it happens,

²⁰ Of course, this description begs the question of how the dislocate receives its case, which is often visible in English as well as German. At this stage we have no concrete analysis to offer, but will take up this question briefly in §3.2.2 below.

²¹ A more radical variant of this ‘high left-peripheral position’ approach has been sketched in Boeckx and Grohmann (2003). Although the technical details differ, the comments in the text appear to apply to such an analysis also.

there is a range of facts about HTLD structures that such proposals are hard-pressed to explain, but which follow naturally on an ‘orphan’ analysis.

One such fact that offers particularly persuasive evidence for an ‘orphan’ analysis is that HTLD dislocates may readily be pronounced and understood as (confirmatory) questions, for which the host sentence represents the answer:

(52) A: Was hältst du von Hans?

B: Dem Hans? Er ist ein netter Typ.

(53) A: What do you think of Hans?

B: Hans? He’s a nice guy.

If HTLD dislocates were indeed elements in the sentence that hosts them, then this pattern would be extremely difficult to account for — requiring, for example, a stipulation that elements beyond a certain projection in the tree may have an illocutionary force distinct from that of the rest of the sentence.

Similar remarks apply to the prosodic patterns of HTLD structures more generally. As noted above, the dislocate in these structures has been commonly observed to form a prosodic unit distinct from that associated with the host sentence. This is entirely consistent with the ‘orphan’ claim that these two elements are also syntactically distinct, since one would not expect two such distinct units to be tightly integrated prosodically. However, this would not follow in any direct way from the claim that the HTLD dislocate is an element in the host sentence. Of course, one could again stipulate that elements beyond a certain projection in the tree induce a prosodic break with the rest of the sentence, but such a claim would not appear to follow from any independent principles.

Other, subtler facts about HTLD dislocates also have a ready explanation on a ‘orphan’ analysis but not on one according to which these dislocates are simply left-peripheral elements high in the tree. For example, the pattern in (54) suggests that the negative polarity item *ever* must be c-commanded by a phrase containing the licenser *only*:²²

(54) a. John could only ever get a ‘B’.

b.??John could ever only get a ‘B’.

c. Only a ‘B’ could John ever get.

²² Note that of the speakers we consulted, some did not reject (54b) outright, although they judged it considerably less acceptable than its counterpart in (54a) — perhaps because of the continued existence of the non-polarity item *ever*, equivalent to *always*, as in *forever* and such expressions as ‘Adj as *ever*’. In addition, many speakers found (54c) considerably worse than (54d) (although some had the opposite judgement). Crucially, however, those who accepted (54d) also accepted (55b) but rejected (55a).

- d. Only a ‘B’, John could ever get.

Intriguingly, however, *ever* does not seem to be licensed by *only* in an HTLD structure, as in (55a), with the former in the dislocate and the latter in the host sentence, even though the corresponding HTLD structure without this pair of elements appears to be considerably more acceptable:

- (55) a. *Only a ‘B’, John could ever get that.
 b. A ‘B’, John could get just that.

A natural explanation of this pattern is available on an ‘orphan’ analysis: namely, that the orphan, as an element syntactically independent of its host sentence, cannot c-command any element in this sentence — most notably, the polarity item *ever* in this case. As far we can tell, no obvious explanation is similarly available to more standard analyses of HTLD.

Another pattern that likewise favours an ‘orphan’ analysis over its more standard alternatives is related to the ordering of I-class and N-class dislocates in the same sentence. Now, it is widely accepted that a single sentence may host both classes of dislocates is possible in German as well as English (see, e.g., Grohmann 2003: 199), as demonstrated by sentences like the following ones:

- (56) a. Der Alex, den Wagen, den hat seine Mutter ihm gestern
the Alex the car RP has his mother him yesterday
 geschenkt.
given
 ‘Alex, the car, his mother gave him yesterday.’
 (Grohmann 2003: 159, (57))
- b. Now, my father, this junk he was always collecting. And my
 mother, this same junk she was always throwing away.

The sentences above exemplify what is understood to be the only possible pattern: that in which the I-class dislocate following the N-class dislocate (Grohmann 2003: 145).

Significantly, however, we have found sentences like the following ones, where the order of dislocates appears to be reversed but which are acceptable for at least some speakers:²³

- (57) a. Das Auto, der Hans, er hat das nicht seiner Frau leihen wollen.
the car the Hans he has it not to.his wife lend want
 ‘The car, Hans, he did not want to lend it to his wife.’

²³ Admittedly, the I-class status of the outer dislocates in the German examples is difficult to verify, given that these can arguably be analysed as HTLD dislocates. Such a problem, however, does not arise for the English example, in which the I-class dislocate clearly precedes the N-class dislocate.

- b. Den Hans, das Auto aus Slowenien, den hat es nie
the Hans the car from Slovenia him has it never
 im Stich gelassen
let down

‘Hans, the car from Slovenia, it has never let him down.’

(Gisbert Fanselow, personal communication)

- (58) Now, this junk, my father, he was always collecting. And this same
 junk, my mother, she was always throwing away.

If we adopt the standard assumption that I-class dislocates do indeed occupy a fixed position in the tree, then a natural explanation of these patterns is that N-class dislocates do not, and may thus either precede or follow their I-class counterparts. This is fully consistent with an ‘orphan’ analysis, since the linear order of orphans is not determined by any syntactic position that they occupy in the sentence; but is difficult to reconcile with standard approaches, unless these stipulate additional movement operations to capture such facts.

Of course, certain other properties of N-class structures that we have already described, which distinguish them from I-class structures, seem to be more consistent with an ‘orphan’ analysis, which claims a radical difference between I- and N-class structures, than in analyses in which the difference between these structures is far less pronounced. For example, the observation that N-class dislocates, unlike their I-class counterparts, do not have stable ‘link’ or A-topic properties seems understandable if they are not constituents of the sentence and thus not assigned any well-defined information-structural role in it, as I-class dislocates appear to be. In addition, the contrast between N- and I-class structures with respect to the acceptability of parentheticals intervening between dislocate and host sentence seems understandable if they reflect a difference in the hearer’s task of determining how these two kinds of dislocates are respectively related to the host sentence — a task arguably made more difficult in the case of N-class dislocates when additional ‘non-integrated’ information stands between the dislocate and the host sentence. Neither of these observations, however, has any obvious explanation if N-class dislocates simply occur higher in the tree than their I-class counterparts.

A rather different source of evidence for an ‘orphan’ analysis of N-class structures comes from the many structures that are likewise observed to contain expressions ‘loosely’ associated with the sentences with which they occur (Espinal 1991; Haegeman 1991). Among the many expressions of this kind are parentheticals, non-restrictive modifiers, vocatives, and speech act and perhaps other left-peripheral adverbials (see Shaer 2004), as illustrated in (59). Like N-class dislocates, all of these are fully omissible from their host sentences, which are as such syntactically and semantically complete without them:

- (59) a. Jill, *of course*, still likes Jack.
 b. It is no surprise that you, *a college drop-out*, hate academics.
 c. *Senator*, you are no Jack Kennedy.
 d. *Frankly*, I don't give a damn.
 e. *With his X-ray vision*, George could find the weapons.
 f. *Quietly*, John got stinking drunk.

Significantly, there is a range of evidence, much of it paralleling what we have presented above, that these expressions are indeed syntactically independent of the sentences with which they occur (see, e.g., Espinal 1991). For example, we find left-peripheral adverbials containing polarity licensors apparently not c-commanding negative polarity items in the sentence, as in (60a), just as we found in HTLD structures, and in contrast to uncontroversial movement structures such as subject-auxiliary inversion and focus-moved structures, as shown in (60b, c) (Shaer 2003: 248):

- (60) a. *Only quietly, John ever got drunk.
 b. Only quietly did John ever get drunk.
 c. ?Only QUIETLY, John ever got drunk.

In addition, as McCawley (1982) originally showed, parentheticals like that in (59a) behave with respect to VP ellipsis like elements outside the VP, as illustrated in (61a). This pattern appears to be duplicated among instrumental adverbials like that in (59e), as illustrated in (61b) (Shaer 2004):

- (61) a. John talked, of course, about politics, and Mary did too.
 = 'Mary talked about politics too'; ≠ 'Mary talked too'
 ≠ 'Mary talked, of course, about politics too'
 (McCawley 1982: 96, (5a))
 b. With his X-ray vision, George found the weapons and Tony did too.
 = 'George found the weapons';
 ≠ 'with George's/his own X-ray vision, Tony found the weapons'

A final source of evidence for an 'orphan' analysis of HTLD dislocates is another class of structures that appear to be closely related both to HTLD and to the structures exemplified in (59). These are the 'sentence fragments' (Morgan 1973; Stainton 1995, 2004) illustrated in (62), which can be used to make assertions but are not obviously constituents of sentences:

- (62) a. Nice dress
 b. To Cathy, from Santa (Stainton 1995: 293, (20a–b))

What is most relevant for us here and constitutes a striking form of evidence that such fragments are better treated as orphans than as the pronounced constituents of otherwise unpronounced sentences, as argued by Stanley (2000), Merchant (to appear), and others, is that both HTLD dislocates and fragments display the same patterns of case-marking. In other words, what we find is that the case of both the dislocate and the fragment may be different from what would follow from the apparent thematic function of these elements. Accordingly, German fragments like those in (63) can be marked either nominative or accusative, and those in English can be marked only accusative, irrespective of their thematic function and thus of the case-marking that would be expected if they were constituents of full sentences:

- (63) a. Ein doppelter Espresso, bitte.
 b. Einen doppelten Espresso, bitte.
- (64) a. A: Which Barbie doll do you want? B: Her, please.
 b. A: Who was standing by the window? B [pointing]: Her!

This mismatch between case-marking and thematic function is also found with HTLD dislocates in German and English, suggesting that the same (extra-grammatical) mechanism of case-marking is at play in both. Admittedly, some doubt has been cast in the literature on the desirability of positing such case-marking mechanisms (see, e.g., Merchant 2003: §2), which in this case permit the non-canonical nominative marking of patients and accusative marking of agents. Yet, it is clear that attested patterns of case-marking are in any case far richer than those generally considered in theoretical discussions of case, and include case attraction phenomena such as that illustrated in (65), in which the adjective *firmissimas* agrees in case with the nearest case-marked NP, *quas*, in the embedded clause, rather than *copiis*, the NP that it modifies in the matrix clause:

- (65) Si veniat Caesar cum copiis quas habet
if should come C. with forces-DAT that-ACC has
firmissimas
very strong- ACC
 ‘Should Caesar come with the very strong forces that he has’
 (Kennedy 1962: 156, §332, n. 2)

Such patterns, which constitute an open question for theories of case distribution, suggest that much more needs to be said about case-marking in any event, including the possibility of ‘extra-grammatical’ case-marking mechanisms like the one alluded to above.

What we have seen in this section, then, is that an older approach to N-class structures, investigated in some detail in such studies as Cinque (1983) and Zaenen (1997) but playing a less prominent role than analyses of HTLD

dislocates as occupying high left-peripheral positions, has a good deal to recommend it. Not only does it turn out to accord well with a large range of properties of HTLD — those that we investigated in §2 as well as other patterns — but also accounts for striking parallels between HTLD structures, others that contain expressions ‘loosely’ associated with their host sentences, and so-called ‘sentence fragments’. Finally, while this analysis seemed highly unorthodox, we suggested that it might, despite initial appearances, be consistent with current minimalist conceptions of the grammar after all.

4 Summary and Conclusions

In this paper, we considered an array of prosodic, lexical, syntactic, and discourse properties of two pairs of structures: German weak pronoun left dislocation and English topicalization, on the one hand, and German and English hanging topic left dislocation, on the other. A detailed review of these properties suggested that the dislocates in the former pair of structures, which we dubbed I-class structures, displayed clear signs of being integrated into the structure of their host sentence; whereas the dislocates in the latter pair of structures, which we dubbed N-class structures, displayed clear signs of not being so integrated. After a brief consideration of some current approaches to I-class structures and some puzzling differences between German and English, we turned our attention to the analysis of N-class structures. We began this investigation by reviewing of Cinque’s original (1983) case for treating these as a kind of ‘discourse phenomenon’, and then proceeded to show how his proposal could be cashed out in terms of Haegeman’s (1991) ‘orphan’ analysis, according to which N-class dislocates were syntactically independent of their host sentences. What emerged from this discussion was the straightforward way in which such an approach explained the prosodic, lexical, and ‘connectivity’ facts that we had assembled; and the possibilities that it provided for explaining the discourse properties of N-class structures as well as a range of other facts that were extremely difficult to explain on alternative approaches. Finally, we pointed to additional evidence for such an ‘orphan’ analysis of HTLD dislocates in the form of parallels between these dislocates and other ‘loosely’ integrated elements such as parentheticals and certain left-peripheral English adverbials, on the one hand, and ‘sentence fragments’, on the other. While we admitted at various points in our discussion that a great deal of work remains to be done — with respect both to the collection of data and the development of various details of our analysis — before a truly clear picture of the difference between I- and N-class structures in German and English can emerge, we nevertheless believe that the analysis of these structures that we have proposed here is a compelling one, which suggests interesting new ways of

accounting for the numerous puzzles lying at the syntax/discourse interface of the left periphery.

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