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Anaphoric properties of German right dislocation

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I argue that the so-called 'German right dislocation' in fact comprises two formally and functionally distinct constructions, which I label *right dislocation proper* and *afterthought*. The main focus of the paper lies on right dislocation proper (RD) and its discourse function. I show, that RD is used as a discourse-structuring device. RD marks the referent of the right-dislocated noun phrase as the discourse topic for the following discourse segment. This explains certain anaphoric constraints on the following discourse segment. Thus, the corresponding referent has to be anaphorically resumed as sentence topic of the corresponding sentence at the level of the 'main structure' (i.e., the main story line).

1. Introduction¹

German right dislocation ('Rechtsversetzung', cf. Altmann (1981)) is a construction like (1), which consists of an NP at the right end of the clause and a coreferent pro-form (pronoun (1a) or a full lexical NP (1b)) inside the clause:

- (1) a. *Er_i ist halt wirklich eine dämonische Figur, der Franz Josef_i.*
 He_i is PARTICLE really a demonic figure, the Franz Joseph_i.
 [Altmann (1981: 55)]
- b. *Und dann passierte das Unglück_i, (ich meine) dieser*
 And then happened the misfortune_i, (I mean) this

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schreckliche Autounfälle
terrible traffic-accident.

Since Altmann (1981) it is generally assumed that German right dislocation (GRD) is a device of spoken German, which enables the speaker to resolve or 'repair' a (pro)nominal reference that is unclear and thus might overcharge the hearer (see e.g. also Auer (1991), Selting (1994), Uhmman (1993, 1997), Zifonun et al. (1997)). This cannot, however, be the whole story: there are cases, as in (2), where the pronominal reference is unambiguously clear:

- (2) a. ("Der Taifun!" rief Lukas dem Kapitän zu. "Da ist er!")
("The typhoon!" Lukas called to the captain. "Here it comes!")
Ja, da war er, der Taifun.
Yes, there was it, the typhoon.
[Ende, M. (1990): *Jim Knopf und die Wilde* 13: 190]
- b. (Den Tag, den vergess' ich nicht,) der war viel zu schön, der Tag.
(That day, I'll never forget it,) D-PRON was much too wonderful, the day.
[Altmann (1981:129)]

Here, the function of the GRD is not to disambiguate a pronominal reference, as it is not ambiguous at all, but to mark the referent of the right-peripheral NP as being especially important for the following discourse. In other words, the typhoon (2a) and, respectively, the day (2b) is set as the "subject" or "theme" (in the pretheoretical sense) for the following discourse segment. In (2a), the following segment actually offers a detailed description of the typhoon, of the dark waves, wind and so on.

It has been noticed in the literature that right dislocation might have an additional function of "attracting the attention of the addressee" to the right-peripheral NP (Zifonun et al. (1997:548)). I argue that disambiguation of a pronominal reference and marking the importance of the discourse referent are not two complementary functions of one construction, but that there are in fact two constructions subsumed under the label of GRD: *right dislocation proper* (further right dislocation, RD) and *afterthought* (AT). These two constructions differ not only in their function, but also in their prosodic, syntactic and semantic features. In the following I will shortly summarize these differences (section 2). Then I will view in detail the discourse functions of RD and AT (section 3): The main focus of the paper is RD. I will show that RD marks the referent of the right-peripheral NP as the 'discourse topic referent' for the following discourse segment. The discourse referent in question has to be already established in the discourse model; in this sense RD is anaphoric, and not cataphoric. Besides, RD issues certain constraints on the resumption of the referent of the right-peripheral NP in the following, and supports the subdivision of the discourse segment into 'main structure' and 'side

structure'. AT is shown to be a local repair strategy, that does not have any impact on the discourse structure. A short summary follows in section 4.

2. Right dislocation vs. afterthought: prosodic, syntactic and semantic differences

As stated above, there are prosodic, syntactic and semantic differences between RD and AT. These are briefly introduced in the following.

Prosodically, RD is integrated into the preceding sentence (3a), whereas AT builds a prosodic unit of its own: it has a tone movement of its own and bears a clause-like main accent; it is also often divided from its host sentence by a major pause (3b):

- (3) a. (Den Tag, den vergess' ich nicht,) {der war VIEL zu schön,
(That day, I'll never forget it,) D-PRON was much too wonderful,

der Tag↓.} RD
the day.
- b. (Lisa und Melanie haben sich gestritten.)
(Lisa and Melanie quarrelled.)
{Dann ist sie WEGgelaufen↓}, | {die Lisa.↓.} AT
Then is she ran-away, the Lisa.
(|: pause; { }: prosodic unit; CAPITALS: main accent)

Thus, RD prosodically belongs to its host sentence in a more straightforward way than AT. This is confirmed by the syntactic properties of these two constructions. The most important are the following:

- RD requires morphological agreement between the clause-internal pro-form and the right-peripheral NP (4a), whereas for AT agreement is only optional,² (4b,c). This is expected if RD is syntactically part of its host sentence and AT not, as morphological agreement is a sentence-bound phenomenon.

- (4) a. Der_i war viel zu schön, der Tag_i / *den Tag_i
D-PRON_{MASK_NOM} was much too wonderful, the day_{MASK_NOM} / the day_{MASK_AKK}

2. It is especially easy to violate the gender agreement, as in (4b). The same is true for other kinds of anaphoric constructions: anaphoric resumption is generally possible without gender congruence, but only across sentence boundaries (see Consten (2004: 90)). Thus, gender agreement violation is strong evidence for afterthought not belonging to its host sentence syntactically.

/ *die Feier_i RD
/ the party_{FEM}

b. Es ist ein bisschen gleichförmig, | deine Melodie_i AT
It_{NEUTR} is a bit even, your melody_{FEM}
[attested oral data]

c. Der Zwiespalt [...] zerriss ihn_i fast: | [Fürst Georg III., AT
(The dichotomy [...] tore him_{ACC} nearly: Prince Georg III.,
der Reformator von Anhalt-Dessau]_i,
the reformer_{NOM} of Anhalt-Dessau)

[Chrismon, 05.2004]

– Additions (Altmann (1981): 'Floskeln') *ich meine* ('I mean'), *also* ('that is') etc. are possible with AT (5a), whereas they are not with RD (5b). This is expected, as additions enhance the repairing function of afterthought:

(5) a. (Lisa und Melanie haben sich gestritten.)
(Lisa and Melanie quarrelled.)
Dann ist sie weggelaufen, | (ich meine / also) Lisa.
Then is she ran-away, (I mean / that-is) Lisa.

AT

b. ("Der Taifun!" rief Lukas dem Kapitän zu. "Da ist er!")
("The typhoon!" Lukas called to the captain. "Here it comes!")
Ja, da war er, (*ich meine/ *also) der Taifun.
Yes, there was it, (I mean / that-is) the typhoon.

RD

– AT is not restricted to the position at the right of the clause, but can vary its position: AT can come not only after its host sentence, but also immediately after the coreferent pro-form or even in some other position in the host sentence. RD, on the contrary, is only possible at the right periphery, cf. (6) vs. (7):

(6) a. Ich habe ihn gestern nur mit Mühe wiedererkannt,
I have him_i yesterday only with effort recognized,
| ich meine den Peter.
I mean the Peter_i

AT

b. Ich habe ihn, | ich meine den Peter, | gestern nur
I have him, I mean the Peter, yesterday only
mit Mühe wiedererkannt.
with effort recognized

c. Ich habe ihn gestern | ich meine den Peter | nur
I have him yesterday, I mean the Peter, only

mit Mühe wiedererkannt.
with effort recognized
(I hardly recognized him yesterday, Peter.)

(7) *Der, der Tag, war viel zu schön.³ RD
D-PRON, the day, was much too wonderful.

In (7), AT *ich meine den Peter* ('I mean Peter') comes at the very end of the sentence (7a), immediately after the coreferent pronoun *ihn* ('him') (7b) or between the temporal adverbial *gestern* ('yesterday') and the adverbial *nur mit Mühe* ('with effort') (7c).

Thus, AT, but not RD, can vary its form (allowing additions) and its position in the host sentence.⁴ This makes it implausible that AT is really part of its host sentence syntactically. Prosodic and syntactic autonomy of AT is best accounted for with an analysis as an 'orphan' (in terms of Haegeman (1991), Shaer (2003)). An 'orphan' is a phrase that is syntactically independent of its host sentence and gets integrated into it only at the level of the discourse via some discourse relation. This analysis has consequences for the locating of AT with respect to its host sentence. AT is then not a right peripheral construction, as the right periphery is a sentence-bound concept (and AT is not a part of its host sentence). Actually, in spoken and even in written language, AT often comes explicitly after a sentence boundary, marked, for example, by the intervention of another speaker (8),⁵ or, in the case of written language, graphically (9):

(8) a. A: Ich weiß nicht, wann sie kommt morgen.
A: I know not when she comes tomorrow.
B: wer? A: na die Anna.
B: who? A: INTERJ the Anna.

[attested oral data]

b. A: [...] auf mein Bundesland und auf die Bundesrepublik
A: [...] on my federal-state and on the federal-republic
Schleswig-Holstein

3. This sentence is well-formed only as an afterthought, with the corresponding prosody:
(a) Der, | (ich meine) der Tag, | war viel zu schön. (It, (I mean) the day, was too wonderful.)

4. Grosz / Ziv (1994) show that also in English the possibility of adding *I mean* as well as to vary its position in its host sentence distinguishes afterthought from right dislocation.

5. Uhmann (1993) analyses cases of reference resolution like (8a) and reference correction like (8b) as 'alien-initiated repairs'. They are opposed to 'self-initiated repairs' like in (a):

(a) Ich schreib da vorher der Frau der der Rodi.
I write there before the woman the the Rodi.
(I'll write first to that woman, Rodi.) [Uhmann (1993: 342)].

'Alien-initiated repairs' are always afterthoughts, as their prosody shows. However, prosodic and syntactic tests suggest that both instances of RD and of AT are subsumed under 'self-initiated repairs'.

Schleswig-Holstein.

B: (Zuruf von der CDU/CSU): Bundesrepublik Schleswig-Holstein?

B: (shout from the CDU/CSU): Federal-republic Schleswig-Holstein?

A: Entschuldigung, ich meine die Bundesrepublik Deutschland.

A: Sorry, I mean the federal-republic Germany.

[plenary protocols of the German parliament, 1996–2003]

- (9) (Der Koch war schon an Bord, der Matrose ebenfalls.) Er aß die Fliegen.

The cook was already on board, the sailor too. He ate the flies.

Der Koch, nicht der Matrose.

The cook, not the sailor.

[Yann, Martel: *Schiffbruch mit Tiger*: 364⁶]

So there is ample evidence that AT does not belong syntactically to its host sentence. RD on the contrary is, considered syntactically, a real part of its host sentence. Its exact syntactic analysis is impossible within the scope of this paper.

As for the semantic differences between RD and AT: RD is much more restricted as far as the semantic status of the NP is concerned. The RD-NP can only refer to a definite specific individual (10a), whereas neither indefinite NPs (10 b) nor any kind of quantificational NPs (10 c) are possible:

- (10) a. Da kommt er schon wieder, der Peter / der
There comes he already again, the Peter / the
blonde Mann / dieser blonde Mann.
blonde man / that blonde man.
- b. Da kommt er schon wieder, *so ein Typ aus dem Tanzkurs.⁷
There comes he already again, such a guy from the dancing-class.
- c. Alle blonden Frauen sind für ihn wunderschön. Peter liebt sie,
All blonde women are for him beautiful. Peter loves them,

6. I owe this example to Konstanze Marx, p.c.

7. (10b) and (10c) would be well-formed as ATs, cf. (a) and (b):

(a) Da kommt er schon wieder, | ich meine so ein Typ aus dem TANZkurs.

(Here he comes again, I mean a guy from my dancing class.)

(b) Peter liebt sie, | ich meine ALle blonden Frauen.

(Peter loves them, I mean all blond women.)

*alle blonden Frauen.⁸

all blonde women.

This is the reason why operator binding as in (11) is only marginally available for RD, even if considered syntactically nothing would prevent it: *seine Frau* ('his wife') here does not refer to a specific individual but to an ordered set (of women in a relation to men), and that is against the restrictions on the NP in the RD construction:

- (11) a.??? Jeder Mann_i liebt sie, seine Frau_i.
Every man_i loves her, his_i wife.

On the other hand, AT allows nearly all possible types of NPs, both definite and indefinite, and as far as the latter are concerned, specific as well as non-specific. In (12a) the NP is indefinite specific, in (12b) indefinite generic, and in (12c) indefinite non-specific:

- (12) a. Sie kommt heute zum Abendessen, | ich meine eine Frau aus
She comes today to dinner, I mean a woman from
meinem TANZkurs.
my dancing-class.
- b. Sie sind Fleischfresser, | ich meine Löwen.
They are carnivorous I mean lions.
- c. Hast Du eins, | ich meine ein Euro-Stück?
Have you one, I mean a euro-piece? (*context*: standing near a
locker in a library)

This difference between RD and AT correlates with the more general constraint on the RD-NP: it has to denote a discourse-old entity (in the sense of Prince (1992)),⁹ discourse-new entities are pragmatically dispreferred as referents for the NP (13a):

- (13) A: Und wie geht die Festvorbereitung?
B: Ich weiß nicht was ich noch versuchen soll. Ich kann einfach keine Jazz-Band für den Abend aufreiben.

8. Note that the discourse in (10c) would be well-formed without right dislocation, cf. (a):

(a) Alle blonden Frauen sind für ihn wunderschön. Peter liebt alle blonden Frauen.

All blond women are for him beautiful Peter loves all blond women
Grosz / Ziv (1994) state that in English, right dislocation cannot be used to refer to entities that were mentioned in the sentence immediately preceding the one with the right dislocation (Grosz / Ziv (1994: 190); see, however, objections in Ward / Birner (1996)). In German this is possible, cf. (b), so that does not account for the ill-formedness of (10c):

(b) Verena ist für ihn die schönste. Peter liebt sie, die Verena.

Verena is for him the prettiest Peter loves her, the Verena

9. Ward / Birner (1996) show that the same holds for right dislocation in English.

A: How are the festival preparations coming along? B: I don't know what I should try next: I haven't been able to get a jazz band for the evening.

a. A: #Du könntest ihn fragen, diesen Chorleiter.

A: #You could him ask, that choirmaster.

(Bestimmt kennt er jemanden.)

(Sure he knows somebody.)

RD

b. A: Du könntest diesen Typen fragen, | na, diesen CHORleiter.

A: You could that guy ask, INTERJ this choirmaster.

(Bestimmt kennt er jemanden.)

(Sure he knows somebody.)

AT

Obviously, this does not hold for AT, where the NP in (13b) can also be discourse-new. The only restriction that holds for AT is that it should be easily identifiable through the particular NP expression, so that AT can best fulfil its function of repairing an insufficient reference. So, (14a) is a better repair than (14b), even if one assumes that the information that apples are pip fruit and plums are not, and that red delicious is an apple breed, is hearer-old:

(14) a. Ich habe Äpfel und Pflaumen gekauft. Die schmecken aber
I have apples and plums bought. They taste but
leider nicht, | (ich meine) die Äpfel.
unfortunately not, (I mean) the apples

b. Ich habe Äpfel und Pflaumen gekauft. Die schmecken aber
I have apples and plums bought. They taste but
leider nicht, | (ich meine) #dieses KERNOBST / #die RED Delicious.
unfortunately not, (I mean) those pip-fruit / the 'red delicious'.

So the AT-NP is semantically much less restricted than the right dislocation one. The latter has to denote a specific definite individual that is discourse-old. This means that RD is not cataphoric (as claimed e.g. in Zifonun et al. (1997)) but anaphoric: the discourse referent which the pronoun and the right-peripheral NP refer to has to be already present in the discourse representation.

However, there appear to be plenty of exceptions to this latter constraint, where the sentence with RD opens the discourse, and thus the NP appears to denote a discourse-new entity, e.g. (15):

(15) a. Der spinnt doch, der Typ / dieser Schröder.

He is-crazy yet, the guy / this Schröder.

(context: A and B are talking about linguistics. A sees a newspaper B has on his table with a picture of the German federal chancellor on the front page, and comments on it.

b. Es gibt sie noch, die guten Nachrichten aus der deutschen Universität.
It gives them still the good news from the German university.
(You can still find some – good news coming from German universities.
(first sentence of a lead))

(ZEIT 21, 13.5.04)

However, cases like (15) are only seeming exceptions, as such discourse-initial use is only possible under certain conditions. In spoken discourse like (15a), it requires mostly an explicit pointing gesture to the picture that identifies the referent.¹⁰ So the referent here is not discourse-new in the proper sense of the word, but rather situationally evoked (in the sense of Prince (1981)). Situationally evoked entities behave like discourse-old ones with respect to different linguistic diagnostics,¹¹ and can thus be regarded as discourse-old. The case is a bit different with the written discourse. Here the RD implicitly embeds the beginning discourse into some larger, thematically contiguous setting that is familiar to the author and the recipient of the discourse. In (15b) such 'meta-discourse' is a series of articles about the German university system and its future in the weekly German periodical *Die ZEIT*, and the author of the text from which (15b) is quoted clearly relies on his readers to know this. In this sense, even in cases like (15), the discourse referent in question is still discourse-old.¹²

To sum up: there is ample evidence for the assumption that there are actually two distinct constructions subsumed under the name 'German right dislocation': right dislocation proper and afterthought. The former is prosodically and syntactically a part of its host sentence. The 'dislocated' NP refers to a specific definite NP denoting an individual. The corresponding referent is marked as the 'theme' for the following discourse segment. As for the afterthought, it is a so-called 'orphan', i.e. it is prosodically and syntactically independent of its host sentence, and gets integrated into its host sentence only at the level of the discourse. Its function is to repair an insufficient (pro)nominal reference that might otherwise remain unclear. In the following, I will focus on the discourse functions of both constructions.

10. In the case of using the name (*this Schröder*) instead of *this guy*, an explicit gesture is not necessary. That is why the right dislocation NP here is situationally evoked rather than straightforwardly deictical.

11. E.g. situationally evoked information can be preposed in inversion, which is the case with the discourse-old information, as Birner / Ward (1998) show, cf. (a): one can point to a table in the corner and utter (a) without the table being mentioned before:
(a) On that table is a red pen; could you bring it to me?
I owe this observation and example to Betty Birner (p.c.).

12. This requires a broad understanding of discourse involving different sorts of non-linguistic information sources. This seems to me, however, to be in line with recent discourse theories, e.g. SDRT (Asher / Lascarides (2003)).

3. Right dislocation and afterthought in discourse

It has been shown above that RD marks some discourse referent as being the “theme” for the following discourse segment. I propose the term *discourse topic referent* for this case. This corresponds to the ‘entity-based’ approach to discourse topic, which is advocated for example in Oberlander (2004). According to Oberlander, the only sort of discourse topic relevant for establishing coherence is the entity the discourse segment is “about”.¹³ With respect to RD this means that it marks the referent of the right-peripheral NP as being the discourse topic referent for the following discourse segment. This can be best illustrated by (16). It is the very beginning of a book about Berlin and its citizens:

- (16) Ob sie so sein müssen, die Berliner,
 whether they so be must the Berliners
 das fragte sich das restliche Deutschland seit jenem Tag, da man ihre Stadt zur
 Hauptstadt des Reiches gemacht hatte. Und seit 1871 pflegten viele Deut-
 sche bei dieser Frage den Kopf zu schütteln. Denn die Berliner waren –
 geben wir es ruhig gleich zu – nicht überall beliebt.
Whether they have to be like this, these Berliners, was the question the rest of
 Germany had asked themselves since the day when their city had been made
 the capital of the state. And since 1871 many Germans have shaken their
 heads to this question. For Berliners were not especially loved everywhere, as
 we can easily concede.

[Fischer-Fabian, S. (1959): *Berlin-Evergreen*: 5]

The text is going to be about the citizens of Berlin, and thus they are the discourse topic referent of the text segment.¹⁴ This fact is explicitly marked by the RD in the first sentence. Naturally, we expect that the referent of the right-peripheral NP is

13. The existence of some kind of entity that is most salient at the given stage of the discourse and that is relevant for establishing coherence seems to be the common point which is shared by the papers in the recent issue of *Theoretical Linguistics* dedicated to discourse topic: cf. “recurring sentence topic” in Oberlander (2004), “protagonist” in Zeevat (2004), “local topics within discourse segments” in Kehler (2004), and “Discourse topic 1” in Stede (2004).

14. In a sense, the whole book is about the people of Berlin. But my understanding of the discourse topic referent is a more local one: it is the most salient discourse referent for a given segment. The segment is understood intuitively as several thematically connected utterances (this corresponds roughly to a paragraph in written texts). Thus, discourse topic referents change rather often as the text goes on. This understanding of the discourse topic referent corresponds more or less to the concept of «local topics within discourse segments» in Kehler (2004). Whether these local discourse topic referents can be organized into systems with discourse topics of some higher grade dominating them (similar to ‘discourse tree’ and ‘question under discussion’ with subquestions in Büring (2003)), cannot be discussed in this paper.

going to be resumed in the following. This expectation holds: the referent is resumed with the anaphoric personal pronoun *ihre* (‘their’) and then once more with the full NP *die Berliner* (‘the citizens of Berlin’) in the following segment (marked with boldface in the text).

Now, this observation is too weak as yet: not only the most salient referent in question, but also many other referents are resumed again in the following (e.g. *the question* and *Germans*). What is relevant here, is that we expect the discourse topic referent to be resumed as the sentence topic of its sentence. In other words, the discourse referent which the whole segment is about is expected to emerge as what a certain sentence of this segment is about.¹⁵ To test this point I assume that the structural position for sentence topic in German is one in the middle field directly above the base position for sentence adverbials, as proposed in Frey (2004):

In the middle field of the German clause, directly above the base position of sentential adverbials (SADVs), there is a designated structural position for topics (in the aboutness-sense): all topical phrases in the middle field, and only these, are located in this position.

[Frey (2004: 208)]

Frey (2004) shows that topics are generated in this position (although afterwards they may be moved into the prefield position). Sentence adverbials are those expressing “speaker’s estimation of the eventuality” (Frey (2004: 208)), like *unfortunately* or *probably*. Relevant for testing the topicality of a NP is whether this NP takes the position immediately before or after a sentence adverbial¹⁶.

As one sees in (17), the referent of the right-peripheral NP has to be resumed as the sentence topic of the corresponding sentence:

- (17) Ob sie so sein müssen, die Berliner, das fragte sich das restliche Deutschland
 seit jenem Tag, da man ihre Stadt zur Hauptstadt des Reiches gemacht hatte.
 Whether they really have to be like this, these Berliners, was the question the
 rest of Germany had asked themselves since that day when their city had
 been made the capital of the state.

15. I understand sentence topic, in accordance with Frey (2004), in the aboutness sense (cf. Reinhart (1981)), as the constituent the sentence is about. Although the exact relation between sentence topic and discourse topic is not quite clear, there is undoubtedly some relation leading to discourse topic referents tending to emerge as sentence topics (see also Oberlander (2004)).

16. It is important that it concerns only sentence adverbials in their neutral use, and not in the focus-inducing one, like in (a), where *anscheinend* (‘apparently’) is used to focus the NP *dem Otto*:

(a) Dem Otto *anscheinend* hat sich Maria anvertraut.

DET Otto apparently has REFL Maria confided (in) [cf. Frey (2004: 229)].

1. Im ganzen Land waren Berliner seltsamerweise wenig beliebt.
In-the whole land were Berlinersstrangely little liked.
2. #Im ganzen Land waren seltsamerweise Berliner wenig beliebt.
In-the whole land were strangely Berliners little liked.
Strangely, in the whole state the Berlin people were not very popular.

The data from (17) confirm: as expected, the discourse topic referent of a given segment is referred to with the sentence topic expression in sentences that constitute this segment. However, this is not always the case, as the short discourse in (18) shows. This is a short report in a local paper about a certain tourist bus service called "Märkische Schweiz". The discourse topic referent (the tourist bus) is marked by the RD in the first sentence¹⁷. In the following it is resumed through anaphoric personal pronoun *ihn* / *er* / *ihm* (different case forms of 3d person singular masculine), possessive pronoun *seine* ('its') and an indirect anaphor *die Route* ('the route') (resumptions are marked with boldface):

- (18) 1. Viele Freunde hat er im vergangenen Sommer gefunden - der
Many friends has it in last summer found - the
Ausflugsbus "Märkische Schweiz".
tourist bus "Märkische Schweiz"
It found many friends last summer - the tourist bus "Märkische Schweiz"
2. Deshalb haben **ihn** DB Regio und die Strausberger
because-of-that have it DB Regio and the Strausberg
Verkehrsgesellschaft auch 2004 wieder ins Ausflugsprogramm genommen.
traffic-company also 2004 again in-the trip-programme taken
That is why DB Regio and the traffic company of Strausberg put it once
again in 2004 in the trip list.
 3. Vom 15. Mai bis 12. September zieht er sonntags, sonntags und
From 15th may till 12th september pulls it saturdays, sundays, and
feiertags im Zwei-Stunden-Takt **seine** Runden durch das
on-holidays in-the two-hours-rhythm its rounds through the
Minigebirge östlich Berlins.
mini-mountains to-the-east-of Berlin
From 15th May till 12th September it makes its rounds through the hills to
the east of Berlin every two hours on Saturdays, Sundays and holidays.)
 4. Wunderschöne Landschaften, Schlösser und Herrenhäuser kann man
Wonderful landscapes, castles and manor-houses can one

17. However, the referent is not discourse-new here; it is introduced first by the title *Bus "Märkische Schweiz" startet in die zweite Saison* (Bus "MS" starts to its second season).

- mit **ihm** entdecken, Kunst, Kultur, Geschichte in vielen Facetten.
with it discover arts, culture, history in many facets
Wonderful landscapes, castles and manor houses can be discovered with
it, arts, culture and history in many facets.
5. Vom Bahnhof Müncheberg führt die Route über Buckow
from-the railstation M leads the route over B
durch die Teichlandschaft von Karlsdorf, ins Schinkeldorf
through the pool-landscape of K, in-the S.-village
Neuhardenberg, dann zum Schloss Wulkow und zurück über
N., then to-the castle W and back over
Bahnhof Trebnitz nach Müncheberg.
railstation T to M
From the Müncheberg station the route leads via Buckow through the
lakes of Karlsdorf, to the Schinkel village Neuhardenberg, then to
Wulkow castle and back via Trebnitz station to Müncheberg.
[Punkt 3, 13.5.04]

Now, the question is whether or not the expressions resuming the discourse topic referent are sentence topics. In (19) it is tested clause-after-clause with the help of the middle field topic position:

- (19) 2. a. Deshalb haben **ihn** logischer Weise (logically) DB Regio und die Straus-
berger Verkehrsgesellschaft auch 2004 wieder ins Ausflugsprogramm
genommen.
b. #Deshalb haben DB Regio [...] logischer Weise **ihn** wieder ins Ausflugs-
programm genommen.¹⁸

18. To be sure that the variant in (19-2b) is really ruled out because of non-topicality being unsuitable in this discourse, I changed the position of the subject *DB Regio* [...]. Pronoun in a non-topical position is only possible when it is focused (contrast focus), like in (a), as Manfred Consten pointed out to me. This, however, requires that the topic position is filled with the subject NP, cf. (b):
Der Bus war viel beliebter als die Straßenbahn. (The bus_{MASK} was much more popular than the streetcar_{FEM})

- (a) Deshalb hat DB Regio logischer Weise **ihn**, und nicht **sie**, wieder
because-of-that has [DB Regio]_{TOP} logically [it_{MASK}]_{FOK} and not [it_{FEM}]_{FOK} again
ins Ausflugsprogramm genommen.
in-the trip-list took.
- (b) *Deshalb hat [Ø]_{TOP} logischer Weise **ihn**, und nicht **sie**, DB Regio wieder
because-of-that has [Ø]_{TOP} logically [it_{MASK}]_{FOK} and not [it_{FEM}]_{FOK} DB Regio again
ins Ausflugsprogramm genommen.
in-the trip-list took.

In 2., the pronoun *ihn* ('it_{AKK}') is the sentence topic; the variant with the pronoun following the sentence adverbial is not suitable in this discourse. The case is the same in 3. and 5., while in 4. the pronoun *ihm* ('it_{DAT}') might on the contrary be topical as well as non-topical:

- (19) 3. a. Vom 15.Mai bis 12. September zieht er zum Glück (luckily) sonnabends, sonntags und feiertags im Zweistunden-Takt seine Runden durch das Minigebirge östlich Berlins.
 b. #Vom 15.Mai bis 12. September zieht zum Glück er [...] seine Runden durch das Minigebirge östlich Berlins.
4. a. Wunderschöne Landschaften, Schlösser und Herrenhäuser kann man mit ihm unerwarteter Weise (unexpectedly) entdecken, Kunst, Kultur, Geschichte in vielen Facetten.
 b. Wunderschöne Landschaften, Schlösser und Herrenhäuser kann man unerwarteter Weise mit ihm entdecken [...]
5. a. Vom Bahnhof Müncheberg führt die Route in einer gut durchdachten Weise (in a well-considered way) über Buckow durch die Teichlandschaft von Karlsdorf, ins Schinkeldorf Neuhardenberg, dann zum Schloss Wulkow und zurück über Bahnhof Trebnitz nach Müncheberg.
 b. #Vom Bahnhof Müncheberg führt in einer gut durchdachten Weise die Route über Buckow durch die Teichlandschaft von Karlsdorf [...]

It is not arbitrary whether expressions referring to the discourse topic referent are sentence topics or not. To explain this I adopt the analysis in von Stutterheim / Klein (2002). Von Stutterheim and Klein distinguish between 'main structure' and 'side structure(s)' in a discourse. The main structure is the main story line, which includes partial answers to the 'Quaestio', a (mostly) implicit question which the discourse as a whole is answering. The side structure consists of sentences supplying information that is not immediately relevant as a partial answer to the Quaestio.¹⁹ An example illustrating the point is (20): here, the clauses 1–3 and 6 are answering the Quaestio *What was your old flat like?*, whereas clauses 4 and 5 build a side structure expanding on the subject of the yard:

19. The side structure comprises such deviations from the main story line that still stay in the big thematic continuity, as opposed to real breaches with a total change of subject, which rather often occur in spoken discourse.

(20) *Quaestio*: What was your old flat like?

- | | | |
|--|-------------------------|-------------------------|
| 1. It had four rooms and a rather big kitchen. | } <i>main structure</i> | } <i>side structure</i> |
| 2. The rooms were light and airy. | | |
| 3. Two faced the street and two the yard. | | |
| 4. That was where the children always played. | } | |
| 5. That's what we miss now most. | | |
| 6. Besides, all rooms were parqueted. | | |

[adapted from Stutterheim (1997: 27)]

To return to the text (18): the discourse topic referent here, or, respectively, the *Quaestio*, is "the tourist bus "MS" and its route"²⁰. The main story line then is constituted through the clauses 1, 2, 3 and 5; the side structure consists of the clause 4, which does not supply information immediately relevant for the *Quaestio*. Clause 4 is exactly the clause where some other discourse referent, i.e. *wunderschöne Landschaften* etc. ('wonderful landscapes, castles and manor houses')²¹, and not the discourse topic referent of the whole segment, might be expressed as the sentence topic. This means, that the discourse topic referent is resumed as the sentence topic on the level of the main structure, whereas on the level of the side structure some other discourse referents are referred to as sentence topics²². Thus, we can conclude that RD itself belongs to the main structure of its discourse segment, and by marking a discourse referent as the discourse topic referent for the following segment, it ensures that at the level of the main structure this referent

20. For von Stutterheim (1997), *Quaestio* does not have to appear as a «speech act of questioning»; she defines it as the «main point» of a text, that is «theoretically reconstructable as the question that the text is bound to solve» (von Stutterheim (1997: 18) [translation mine: MA]). So, in this sense, *Quaestio* and the discourse topic referent do not differ much.

21. The question is whether there is a two-part sentence topic with the second part being the NP *arts, culture and history in many facets* at the right periphery, or whether this NP is better analyzed as an elliptical addition to the sentence, which does not really syntactically belong to the sentence. Theoretically, right-peripheral sentence topics seem to be possible in German (cf. Frascarelli / Hinterhölzl (to appear)). However, I tend to the ellipsis analysis for the NP *arts, culture and history in many facets*. As this issue is not immediately relevant for this paper, I do not pursue it further here.

22. For the case in (19-4a) I assume that the clause is meant by the speaker to be relevant for the *Quaestio* (i.e. discourse topic referent), and thus belongs to the main structure. It might be an option to assume that side structure implies a change of the discourse topic referent, e.g. in (20) the discourse topic referent of the main structure would be the old flat, and the discourse topic referent of the side structure would be the yard. However, more evidence is required to be able either to claim or to disprove this. The introduction of a new discourse topic referent might be plausible in the case of relatively extended side structure (comprising at least several clauses).

will be resumed as the sentence topic of the corresponding sentence(s), and thus coherence will be maintained. This is the role RD plays in the global discourse structuring.

As for AT, it does not have any consequences for the structuring of the whole discourse segment: in (21), the discourse segment is about a certain play with an actress playing the role of a nun, and the afterthought occurs in the utterance claiming that the actress was much more beautiful than the actual nun. The nun is in no way the discourse topic referent of the segment, and the afterthought does not change anything in this respect: the text continues to be about the play:

- (21) [...] und das ist es auch [...] was das Stück will, was man um so deutlicher sieht, als die Bethmann wirklich eine sehr hübsche Frau ist oder doch zum wenigsten viel hübscher, als sie wirklich war ich meine die Nonne was aber nichts schadet [...]
as she really was I mean the nun what but nothing damages [...] and this is also [...] what the point of the play is, and one sees it even clearer, because the Bethmann is really beautiful, or at least much more beautiful than she really was, I mean the nun, but it was not so bad [...]

[Newspaper Corpus of Bonn BZK: 2014916]

Thus, AT is a local strategy, which is only concerned with the previous sentence, or to be more exact, with that expression in it whose reference AT is clearing.

To summarize: RD is an anaphoric construction that marks a discourse-old referent as being the discourse topic referent for the following segment (in the sense of the definite specific entity the discourse segment is about). In this sense, RD is a forward-looking strategy used to structure the following discourse segment. It is responsible for dividing the discourse segment into the main structure and side structure, and for the resumption of the discourse topic referent as sentence topic on the level of the main structure.

AT is a purely local backward-looking repair strategy that resolves an unclear (pro)nominal reference in its host sentence.

4. Summary

In this paper I have shown that there is ample prosodic, syntactic, semantic and discourse-functional evidence for the distinction between RD and AT in German. In short, the differences between RD and AT are the following:

RD is a prosodic and syntactic part of its host sentence (presumably a right adjunct). In terms of the discourse function RD marks the referent of the right-dislocated NP as the discourse topic referent for the following discourse segment.

This interacts with the preference for definite specific NPs with individual reference in RD constructions. The referent of the NP has to be discourse-old, i.e. already established in the discourse representation. In this sense RD is anaphoric, and not cataphoric.

RD imposes certain anaphoric constraints on the following discourse segment: the discourse referent marked as the discourse topic referent has to be resumed in the following as a sentence topic of the corresponding sentence. This constraint applies to the level of the main structure of the segment. Sentences where the discourse topic referent is not resumed or is resumed as a non-topical expression are argued to construct the side structure of the segment.

As for AT, it is shown to be prosodically and syntactically independent of its host sentence, and thus not a right-peripheral construction in the proper sense of the word, but an 'orphan', that can occur (also) after the end of the sentence. Discourse-functionally it is a local reference repair strategy.

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Antecedents of diverse types

An investigation of the syntactic and semantic relationships in a *wh*-relative construction

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The present paper addresses the issue of the grammatical relations in German *wh*-relative clause constructions. It discusses data demonstrating that the ordinary assumption that German *wh*-relative clauses generally relate to propositional antecedents must be revised. In particular, it shows that the syntactic antecedent of a *wh*-relative clause has to be separated from its semantic antecedent(s). *Wh*-relative clauses relate syntactically to a functionally complete sentential projection, while they relate semantically to entities of various kinds. The semantic objects that may function as antecedents of a *wh*-relative clause are determined by the semantic type of the anaphoric *wh*-expression introducing a *wh*-relative clause. The paper provides an account of the described empirical facts in the framework of Discourse Representation Theory.

1. Introduction

In the present paper I broach the issue of the syntactic and semantic type of a possible antecedent of a *wh*-relative clause. Referring to complex sentences like (1) as *wh*-relative constructions,

- (1) a. Archäologen erforschen das Umland der Polis von Milet, was
archeologists explore the hinterland of the polity of Milet which
sehr interessant ist.
very interesting is
 'Archeologists explore the hinterland of the polity of Milet, which is very interesting.'