Linguistische Berichte

SPRACHWANDEL
Marco Coniglio: Relative clause marking in historical German

SYNTAX
Christian Fortmann: Warum-infinitives in German

SEMANTIK-PRAGMATIK-SCHNITTSTELLE
Mingya Liu: The semantics and pragmatics of chadian mei in Mandarin Chinese

Rezension
Informationen und Hinweise
Inhalt

Beiträge aus Forschung und Anwendung

Sprachwandel

Marco Coniglio
Relative clause marking in historical German ............................................ 139

Syntax

Christian Fortmann
Warum-infinitives in German................................................................. 179

Semantik-Pragmatik-Schnittstelle

Mingya Liu
The semantics and pragmatics of chadian mei in Mandarin Chinese ...... 229

Rezension

Nanna Fuhrhop
Peter Eisenberg (2017): Deutsche Orthografie. Regelwerk und
Kommentar ............................................................................................ 259

Informationen und Hinweise

LB-Info 258 ............................................................................................ 267
Hinweise für Autorinnen und Autoren..................................................... 271
Abstract
In Old High German, relative clauses may be either introduced by *d*-pronouns or by relative particles (or by a combination of both). In this paper, it is argued that, despite their optionality, only relative particles can be considered to be real relative markers, whilst *d*-pronouns occupy the first position of relative clauses for information-structural reasons. A corpus-based pilot study reveals the properties of relative particles and explains their distribution. The results of this survey are then extended to other stages of the language and a diachronic scenario is sketched in order to account for the origin, development and eventual loss of relative particles, as well as for the emergence of inherent relative pronouns in German.

1 Introduction
Present-Day German (PDG)\(^1\) relative clauses (RCs) are traditionally described as being typically introduced either by a relative pronoun of the *d*-type (a *d*-pronoun) – *der, die, das* – or, more rarely and mostly in the written language, by one of the *w*-type – *welcher, welche, welches*:\(^2\)

---

\(^1\) In this paper, the following abbreviations will be used: OHG (= Old High German, 750–1050 A.D.), MHG (= Middle High German, 1050–1350), ENHG (= Early New High German, 1350–1650), NHG (= New High German, 1650–today), but, more specifically, the abbreviation PDG (= Present-Day German) will be used only when referring to the standard German spoken at the present day.

\(^2\) Relative adverbs (like *wo* ‘where’, *wann* ‘when’, etc.) – which are not limited to the written language – are not the focus of this paper, but should be mentioned here for the sake of completeness.

More generally, there is extensive literature on the syntax of RCs and specifically on German RCs, both from a synchronic and a diachronic perspective. Making an exhaustive list of the most important work on this topic would be too difficult an enterprise. Just consider, for example, the work by Lehmann (1984), Alexiadou et al. (2000), de Vries (2002), and – as regards German more specifically – by Tomanetz (1879), Fleischmann (1973: 114ff.), Baldauf (1983), Fleischer (2005), Axel-Töber (2012), etc.
Die Polizei sucht nach der Mordwaffe, die/welche gestern verschwunden ist.

The police are looking for the murder weapon(,) that/which disappeared yesterday.

If we have a look at historical data, we observe that, while the RC of the w-type is a relatively recent construction (attested in ENHG, cf. Behaghel 1928: 717ff.), the RC of the d-type is attested much earlier and is therefore a much older construction (cf. Fleischmann 1973: 114ff.).

Previous stages of the language also exhibit other types of RCs with a different origin and history, such as OHG RC-like constructions introduced by só (h)wër só ‘whosoever’ (or só (h)waz só ‘whatsoever’), which are not considered in the present investigation,3 or MHG and ENHG RCs introduced by und- ‘and’ and so ‘so’ (cf. Schrod 2004: 172ff.; Paul 2007: 405ff.; Ebert et al. 1993: 444; Ferraresi & Weiß 2011; Brandner & Bräuning 2013). All these and other types of RCs are no longer attested or eventually developed into different kinds of constructions.

In this paper, I will concentrate on RCs introduced by a d-pronoun (and/or by a particle) since a diachronic comparison with previous stages of German reveals that this type of RC is well attested and highly frequent through the whole history of the language (see 4.2 for some considerations on the origin and function of the w-series). Furthermore, I will restrict my investigation to OHG as it is a crucial period for the development of RC constructions, but I will then briefly sketch a plausible diachronic scenario also covering subsequent developmental periods (see 3.4 and Section 4).

Traditionally, three major groups of RCs are distinguished for OHG (cf. Schrod 2004: 172ff.).

1. RCs are most often introduced by a relative pronoun (cf. Schrod 2004: 176ff.). This is the type we know from PDG:

(2) […] pî demo Satanase, der inan uarsenkan scal: (M 45)

by the Satan d-pro him ruin shall

‘by Satan, who will ruin him.’

For a thorough classification of the different types of RCs in PDG, cf. Holler (2005: 71ff.). In particular, consider the existence of free d-RCs. Even if they seem to be similar to free w-RCs, they should not be analyzed on a par with them (cf. Fuß & Grewendorf 2014).

3 Notice that such constructions – typical of West-Germanic languages (cf. Johansen 1935: 116ff., 189) – should not be considered on a par with “real” RCs (also cf. Lötcher 1992). They are not introduced by a relative element, but rather by a comparative phrase (cf. Schrod 2004: 170, also see 4.2).

4 If not otherwise stated, the OHG examples cited in the paper were taken from the Old German Reference Corpus (see fn 25).
Such constructions (like their PDG equivalents) may be analyzed as involving the presence in C of a phonetically empty relative particle blocking the movement of the verb, which thus remains *in situ* (cf. for example Axel-Tober 2012: 195ff.). Notice that since *d*-pronouns are etymologically derived from demonstratives (cf. 2.2.1), they are described as such in traditional grammars of OHG. This amounts to saying that they are not considered to be relative pronouns, even though they are used in relative constructions. That is why I refer to them as *d*-pronouns.

2. RCs may further be introduced by what is traditionally considered a relative particle (*de, the, thi*, cf. Schrodt 2004: 175) or by similar adverbial elements that display particle-like properties, such as *der, ther, dà, dar*, etc. The latter stem from the locative adverb *dár* (from the Indo-European pronominal stem *-to-*), but are often used in relative contexts, too, typically occurring in phonetically weak forms (cf. Braune & Reiffenstein 2004: 249). In this paper, I will use the term *relative particle* to refer to both types of elements (also cf. Tomanetz 1879: 27), since – despite the different origin – they develop similar functions in relative contexts. Notice that the relative particle (assumedly in C) may introduce the RC alone or in combination with a *d*-pronoun, which typically precedes the particle:

(3) [...] unti dero, de6 in charcharo unte in andren and of those PRT in prison and in other notin uuaron, [...] (JB 20) hardships were

‘ [...] and of those that were in prison and in other hardships,’

(4) Bat er sih ketrenca daz uuip, thaz Begged he himself to give to drink the woman PRT there came d-pro ther thara quam; (CH 5)

‘He begged the woman who came there to give him something to drink.’

RCs introduced by particles are particularly frequent in OHG (cf. Tomanetz 1879: 25ff.; Diels 1906) and are attested until Luther’s period (cf. Baldauf 1983: 172ff.). In later periods, the particle construction is felt to be archaic (Behaghel 1928: 715).7

---

5 The same can be said of relative particles occurring in some German dialects. Despite their different forms and origins, they display very similar syntactic behaviors and have very similar functions (cf. Fleischer 2005).

6 Notice that, in this specific case, *de* is ambiguous between a relative particle and the nominative and accusative plural form of the *d*-pronoun (cf. Braune & Reiffenstein 2004: 247).

7 Nonetheless, comparable relative particles and complementizers are attested in some modern German dialects (cf. Fleischer 2005: 175f., 181f.; Holler 2005: 83).
A rare group of RCs, which is mentioned here for reasons of completeness, but does not properly belong to the class of RCs introduced by a d-pronoun, is that of asyndetic RCs (cf. Gärtner 1981; Pittner 1995: 202ff.; Schrodt 2004: 174ff.):

(5) er sprah zi then es ruahtun.
    he spoke to them.DAT it wanted
    (O II, 8, 24, cited in Behaghel 1928: 761)

‘He spoke to those who wanted it.’

A straightforward explanation for such constructions is that the C-head is realized by an empty relative particle, while the specifier of C is occupied by a null relative operator (cf. Axel-Tober 2012: 230ff.). These types of RCs seem to be a secondary formation (cf. Johansen 1935: 174ff., but see Erdmann 1874: 124ff. and Dal 1966: 198 for a different view).

This is a quite complex scenario in comparison to PDG, which only exhibits the first type of construction. This leads us to some important questions, firstly, why is such complexity attested in OHG and, secondly, what led to the loss of some types of constructions during the later stages of the language (at least as regards the standard language). In order to answer these questions, we should first understand how clause marking takes place in OHG RCs and what changes in the following periods. Traditionally, it is the relative pronoun in SpecC that is assumed to introduce the RC. But, importantly, recent works have shed new light on the functions of C-particles as clause typing elements. For example, Axel-Tober (2012: 265) argues that OHG RCs like the following one are marked by the presence of a clause typing particle in C:

(6) loguuelhhe  mo therde habet | uuirde  gigeban (T 263, 11)
    to.whomever d-pro-PRT has           is          given
    ‘Whoever has, will be given more.’

Here, a d-pronoun has been fronted to SpecC and a clitic relative particle is simultaneously realized in C. This particle, which may be realized not only overtly, but also covertly, is assumed to mark the RC as a subordinated clause (cf. Axel-Tober 2012: 265).anguage.8

Importantly, if the particle is assumed to mark the RC, further questions regarding the left periphery of such constructions in OHG arise: 1) What is the exact function of the d-pronoun in historical German, given that it derives from a demonstrative element? Besides its referential properties, does it exhibit inherent

8 But see Schrodt (2004: 174) for a different view. He claims that, in the presence of the particle, the verb is typically to be found in the second position (if the particle is not counted) and that the particle is thus not a marker of subordination (but, with respect to ENHG, a different opinion is expressed by Baldauf 1983: 172ff. and Lühr 1985).
relative features or does it inherit them from the relative C-head? 2) What are the reasons for the optional realization of the relative particle?

The next section will first address the properties of the d-pronoun of RCs (Section 2). Notice that I will treat V2 and V-final RCs separately, since they have been argued to display different semantic and syntactic properties. In modern theoretical (both synchronic and diachronic) work on this topic, the d-pronoun in V2 RCs is argued to be a demonstrative, and not a relative pronoun, as is commonly assumed for V-final RCs (2.1). However, some important facts will be taken to indicate that the d-pronoun introducing OHG V-final RCs does not display features typical of relative pronouns either (as hinted at above). I will propose a novel unified analysis of the status of the OHG d-pronoun as an anaphoric demonstrative in both types of RCs (2.2). In Section 3, I will then concentrate on the properties of relative particles based on the results of a pilot corpus study on OHG texts, in which I tested the hypotheses put forward in the literature in order to explain the overt realization of the particle. I will show that the apparent optional overt realization of a relative particle correlates with certain types of RCs, namely subject-RCs (cf. Diels 1906). Section 4 will present a syntactic analysis accounting for the properties of the d-pronoun and of the relative particle, and will sketch a diachronic change scenario compatible with the results of the discussion in the previous sections. Section 5 will conclude.

2 On the d-pronoun

Based on the position of the verb, we can distinguish two main types of RCs introduced by a d-pronoun in PDG, namely V-final RCs and relative-like “integrated V2” structures (here: V2 RCs). Example (8a) shows a RC with the verb occurring in final position, which is the typical pattern for subordinate clauses in PDG. In certain cases, the V2 order is also available, as exemplified in (8b) (examples adapted from Gärtner 2001: 113):

(8) a. Das Blatt hat eine Seite, die ganz schwarz ist.
   *The sheet has a side that is completely black.*

b. Das Blatt hat eine Seite, die ist ganz schwarz.
   *The sheet has a side that is completely black.*

In the following sections, I will first consider the properties of relative pronouns in V2 RCs, which have been described in the literature as exhibiting the properties of demonstratives (both in PDG and in historical German) (2.1). I will then consider the properties of the relative pronouns in OHG V-final RCs and I will show some arguments for treating them as demonstratives as well (2.2). I will conclude the section by claiming that OHG d-pronouns are in fact anaphoric demonstrative pronouns (and not relative pronouns) in all contexts considered. I will argue for
OHG (and MHG) that, both in V-final and in V2 RCs, the d-pronoun is fronted for information-structural reasons. The pronoun picks up an antecedent in the preceding utterance, which then functions as the Aboutness Topic of the RC (in the sense of Reinhart 1981).

2.1 V2 relative clauses in Present-Day German and their Old High German equivalents

Below, I will present the most important results of the studies on German V2 RCs, as discussed in Axel-Tober (2012: 195ff.). She starts from recent investigations on analogous PDG constructions presented in Gärtner (1998, 2001), Endriss & Gärtner (2005), and Ebert, Endriss & Gärtner (2007) (2.1.1) and shows the continuity of such constructions from OHG to PDG (2.1.2).

2.1.1 Present-Day German V2 relative clauses as paratactic constructions introduced by a demonstrative pronoun

For PDG, Gärtner (1998, 2001), Endriss & Gärtner (2005), and Ebert, Endriss & Gärtner (2007) show that V2 RCs of the type in (8b) above are only possible in the presence of specific prosodic, morphosyntactic, information-structural and semantic properties. For example, Gärtner (1998: 2) claims that V2 RCs “must not be immediately preceded by final boundary markings”. Thus, as in their restrictive V-final counterparts, only “a high boundary tone, continuation rise or similar devices marking non-final boundaries” are possible, as illustrated by means of the symbol “(/)” in the following example taken from Endriss & Gärtner (2005: 196f.):

(9) Die Apfeldorfer haben viele Häuser gebaut (/), ‘The inhabitants of Apfeldorf built many houses that are empty today.’

Other properties of V2 RCs are discussed in Gärtner (1998, 2001) and Endriss & Gärtner (2005: 196ff.). Below, I will briefly outline the most relevant ones:

1. V2 RCs must be extraposed (Endriss & Gärtner 2005: 196f.). They cannot be hosted in the clause containing their antecedent:
Relative clause marking in historical German

(10) a. Die Apfeldorfer haben viele Häuser gebaut (/),
    The inhabitants of Apfeldorf have many houses built
die stehen heute leer.
d-pro are today empty

b. * Die Apfeldorfer haben viele Häuser (/), die stehen heute leer,
    gebaut.

2. V2 RCs “should be treated on a par with restrictive modification”, as
   illustrated by Gärtner’s (2001: 112) examples below:

(11) a. Das Blatt hat eine Seite, (/) [die ist ganz schwarz].
    The sheet has a side d-pro is completely black
b. Das Blatt hat eine Seite, (/) [die ganz schwarz ist].
    The sheet has a side d-pro completely black is
c. # Das Blatt hat eine Seite und die ist ganz schwarz.
    The sheet has a side and d-pro is completely black
d. # Das Blatt hat eine Seite. (/) Die ist ganz schwarz.
    The sheet has a side d-pro is completely black

Given that every sheet has two sides, the context forces a restrictive
interpretation. Thus, a (restrictive) RC (11b) is perfectly grammatical in
such case. But both coordination (11c) and a bi-clausal structure with
final boundary (11d) are unacceptable in PDG, since they would imply
a non-restrictive interpretation. Crucially, a V2 RC (11a) is possible in
this case and has the same interpretation as the restrictive RC.

3. V2 RCs “cannot modify an indefinite in the scope of an imperative illo-
cutionary operator” (Gärtner 1998: 20, 2001: 120):

(12) a. * Geh zu einem Arzt, (/) [der kann das heilen]!
    go to a doctor that can that cure
b. Geh zu einem Arzt, (/) [der das heilen kann]!

   RCs are not introduced by relative pronouns (der, die, das) but by an
   identical series of weak demonstratives. This can only be shown by
   means of the contrast in the use of relative wo ‘where’ and demonstra-
tive da ‘there’ in sentences such as those below (Endriss & Gärtner
   2005: 197). Whilst relative wo is only available in V-final RCs, the V2
   order is only compatible with the demonstrative element:

\[\text{However, many native speakers seem to accept (12a).}\]
(13)  
   a.  Es gibt Länder, wo/*da das Bier ein Vermögen kostet  
   b.  Es gibt Länder, *wo/*da kostet das Bier ein Vermögen  
      ‘There are countries where/there the beer a fortune costs / costs a fortune’

5. The antecedent must be a wide-scope indefinite (Endriss & Gärtner 2005: 198):

(14)  
   a.  Ich kenne eine Frau, die besitzt ein Pferd.  
   b.  * Ich kenne keine Frau, die besitzt ein Pferd.  
   c.  * Ich kenne jede Frau, die besitzt ein Pferd.  
      ‘I know a/*no/*each woman who owns a horse’

   In general, Endriss & Gärtner (2005: 213) exclude certain quantifiers as possible antecedents of V2 RCs, namely:

   a.  strong quantifiers (jeder ‘each’, die meisten ‘most of’, definite descriptions, etc.)
   b.  quantifiers that cannot occur in topical positions (fast alle ‘almost all’, die meisten ‘most of’, kein ‘no, not any’, wenige ‘few’, etc.)

   Considering the properties above, Gärtner (1998, 2001) and Endriss & Gärtner (2005) conclude that V2 RCs are semantically integrated structures, but that their syntactic behavior seems to indicate that they are unembedded structures. They claim that such RCs are paratactic constructions introduced by a demonstrative pronoun.10 Although they assume that, from an information-structural perspective, the matrix clause and the RC possibly form a single information unit, for ease of exposition I will treat them as two separate information units here and will assume that at least the d-pronoun belongs to the topic, in that it resumes a referential element, introduced in the preceding discourse. Thus, it marks the Aboutness Topic in the subsequent part of the clause:

(15)  
      Das Blatt hat eine Seite, [Topic die ] [Comment ist ganz schwarz.]  
      (= The sheet has a side [that ] [ is completely black])

   Syntactically, Gärtner (2001: 105) provides the following representation for V2 RCs:11

---

10 A partially diverging analysis is provided by Catasso & Hinterhölzl (2016).
11 IV2 = Integrated Verb Second [= V2 RC].
A V2 RC (CP₂) is merged as the complement of paratactic head π, which hosts the antecedent clause (CP₁) in its specifier. In particular, the operator πₚREL “switches the specification on a weak demonstrative in CP-Spec of its complement from [+demonstrative] to [+relative]” (Gärtner 1998: 36). Thus, this operator is responsible for the relative interpretation of the weak demonstrative in SpecCP₂. This special configuration leads to the interpretation of V2 RCs as semantically integrated but syntactically unembedded structures.

2.1.2 Old High German V2 relative clauses

Since the first written attestations, German demonstrative and relative pronouns have been morphologically identical (cf. 2.2.1). Petrova & Solf (2010: 356) point out that, given the ambiguity of d-pronouns and the possibility for both OV and VO orders in OHG, a number of V2 clauses are ambiguous in this language. They may be interpreted as V2 RCs introduced by a relative pronoun or as main clauses introduced by a demonstrative pronoun (cf. Axel-Tober 2012: 195ff.). Petrova & Solf (2010) illustrate this ambiguity by means of the following example (adapted from Petrova & Solf 2010: 356), for which they assume the readings in (16a) and (16b):

(16) sum tuomo, uus In sumero burgi / ther niₚforhtₚ got (T 200, 31)
    a judge was in a city d-pro not-feared God
    ‘A judge was in a city, who/he did not fear God.’

16(a) In einer Stadt war ein Richter, der sich nicht vor Gott fürchtete. (RC)
    ‘In a city there was a judge that did not fear God.’

16(b) In einer Stadt war ein Richter. Der fürchtete sich nicht vor Gott.
    (main clause)
    ‘A judge was in a city. He did not fear God.’

Notice that the function of the d-pronoun is different in the two interpretations. In (16a), it functions as a relative pronoun, while the reading in (16b) is that of a
demonstrative pronoun. PDG equivalents of the OHG example in (16) can be dis-
ambiguated by means of syntactic and prosodic information. On the one hand, the
position of the verb tells us whether we are dealing with a main clause (V2 order)
or with a RC (V-final order). On the other hand, the antecedent clause has a dif-
ferent prosody. In the case of the main clause interpretation, it exhibits a final
boundary marking, while a high boundary tone or continuation rise (cf. Gärtner
1998: 2) is realized in the case of a (restrictive) RC interpretation.

Notice that in its reading as a RC, example (16) could be seen as an ancestor
of PDG V2 RCs discussed above. Its modern equivalent would be:

(16c) In der Stadt war ein Richter (/), der fürchtete sich nicht vor Gott.
    ‘In a city there was a judge that did not fear God.’

Based on examples like the one in (16), Petrova & Solf (2010) and – in a more
detailed account – Axel-Tober (2012: 195ff.) claim that certain V2 RCs (and anal-
ogous V1 RCs)12 in OHG (and MHG) exhibit the same properties as PDG con-
structions. Although there are a number of ambiguous cases like (16), (unambig-
uous) V2 RCs are definitely attested in older stages of the language, as shown by
examples like the following one, taken from Axel-Tober (2012: 246):

(17) Ein ander tier ist, daz heizzent die Chriech
    an other animal is d-pro call the Greeks
    hyena
    ‘There is another animal which the Greeks call a hyena.’

Even if we do not have access to the prosodic diagnostic formulated in Gärtner
(1998 and subsequent work), Axel-Tober (2012: 207ff.) shows convincingly that
the semantic and syntactic properties of this type of clause (restrictiveness, types
of antecedents, etc.) indicate the historical continuity of the construction. There-
fore, she proposes extending the analysis provided in Gärtner (1998, 2001),
Endriss & Gärtner (2005), and Ebert, Endriss & Gärtner (2007) to OHG (and
MHG) V2 RCs. Her representation of the sentence in (17) looks as follows (Axel-
Tober 2012: 246):

12 V1 RCs are analyzed on a par with V2 RCs by Axel-Tober (2012: 197), with the most important
difference that, in V1 constructions, the first syntactic position – which should be occupied by a d-
pronoun – is not realized phonetically.
Relative clause marking in historical German

Figure 2: Syntactic relation between a V2 RC and its antecedent clause in historical German (Axel-Tober 2012: 246)

Exactly as in PDG, OHG and MHG structures are characterized by a first clause (CP₁) highlighting a referent (in the example, *ein ander tier*), which is resumed by a demonstrative (*daz*) in the subsequent clause (CP₂) and functions as its topic. The interpretation as a RC is guaranteed by a functional projection, a kind of sentence-linking projection, while no relative marking is present on the C-head of CP₂. This head can thus host the finite verb. This explains the availability of V2 in the relative structure.

Let us now turn to the OHG example in (16) above. Its syntactic representation is the one offered in (18a). Following Gärtner (1998), we could assume that the operator π°REL switches the featural specification on the demonstrative in the specifier of its complement from [+demonstrative] to [+relative], as represented in (18b):

(18) a. \[ πP \sum tuomo uuas In sumero burgi \[ π' [π°REL Ø] \[ ther niforht\] got]]
   b. \[ π°REL Ø] \[ ther [+dem] \ldots] > \[ π°REL Ø] \[ ther [+rel] \ldots]

To sum up:

1. In OHG (and later stages), there is a paratactic V2 relative construction with syntactic, information-structural and semantic properties which are similar to those highlighted by Gärtner (1998, 2001) for PDG (as claimed by Axel-Tober 2012: 207ff.).

2. As in PDG, the *d*-pronoun introducing a V2 RC in OHG does not appear to behave like a relative pronoun, but rather like a demonstrative, i.e. like an anaphoric element referring back to a referent introduced in the preceding discourse, which functions as the Aboutness Topic in the RC.

13 Notice that, following Gärtner (2001), Axel-Tober (2012: 246) considers πP to be one information-structural unit consisting of a topic (CP₁ = T) and a comment (CP₂ = K).
14 Axel-Tober (2012: 251) excludes any diachronic relation between V2 (or V1) RCs and V-final RCs, and assumes that both constructions are very old patterns. V2 RCs have always been paratactic, while V-final RCs have always been subordinated.
In the next section, I will show that there are arguments for claiming that OHG (and MHG) V-final RCs are also introduced by a demonstrative pronoun and not by a relative pronoun.

2.2 On the status of the $d$-pronoun in V-final relative clauses (and in general)

The discussion above pointed out that the differences between OHG demonstrative pronouns and relative pronouns seem to be “flattened out” in V2 RCs. But what about V-final RCs? What are the properties of the OHG $d$-pronoun introducing such clauses? Do they really differ from the properties of the $d$-pronoun in V2 RCs?

Below, I will present some empirical and theoretical arguments showing that the properties of the pronoun introducing V-final RCs do not really differ from those of the pronoun in V2 RCs. At least in OHG, relative pronouns are indistinguishable from demonstrative pronouns (cf. Wunder 1965: 407; Fleischmann 1973: 145; Pittner 1995; Lühr 2004: 169ff.). I will argue that the pronoun introducing a V-final RC is in fact an anaphoric element resuming a referent of the preceding discourse like in V2 constructions. Below, I will present two main arguments based on the morphosyntactic properties of the $d$-pronoun and on the possibility for other pronouns (such as personal pronouns) to introduce RCs in OHG.

2.2.1 Morphosyntactic properties of the $d$-pronoun

As in PDG, the forms of the OHG demonstrative pronoun $dër$, $diu$, $daȝ$ are identical with and cannot be distinguished from those of the relative pronoun (and those of the definite article, at least up to the MHG period, cf. Demske 2001: 87ff., with some exceptions described in Braune & Reiffenstein 2004: 247ff.). Thus, there is no formal distinction between demonstrative and relative pronouns either in OHG or in later stages of the language. For OHG, the paradigm of the $d$-pronoun is as follows in both usages (Schmidt 2013: 268):

15 Notice that OHG exhibits another element – $dësër$ – which only has a demonstrative function. It is probably a compound word stemming from the simple demonstrative (in combination with a particle) or from the iteration of another pronominal form (Braune & Reiffenstein 2004: 249; Lühr 1982: 523ff.).
Syntax

*Warum*-infinitives in German

Christian Fortmann

Abstract

The interrogative *warum* connected with a bare infinitival VP forms a specific kind of root structures in German. *wh*-root-infinitives in general are subject to certain syntactic and interpretative restrictions. The subject argument of the infinitival verb cannot be expressed by a lexical NP; it is identified with the speaker, instead. Due to the lack of finiteness these infinitives are restricted to a non-past, prospective, modal interpretation. *warum*-infinitives share these properties. But differing from other instances of *wh*-infinitives they are systematically ambiguous, as they provide a second reading with a non-prospective interpretation referring to a present or past event in which the subject argument is identified with the addressee. It will be argued that the availability of this second reading has to be ascribed to a pragmatic inference which refers to presuppositions of questions in general and of causal questions in particular.

1 *Warum*-infinitives – a special case

Root structures are canonically formed by finite clauses in languages like German, and many other languages as well. The qualification as root structures, of course, is to a certain extent pragmatically motivated. Finite clauses are the common and predominant means to transfer information in natural language discourse. However, there is no plausible syntactic criterion which makes a specific type of syntactic category predestined to form root structures. And, actually, there are root structures which differ from finite clauses not only in being non-finite but which lack verbal predicates altogether. Non-finite and non-clausal root structures do not have the same potential of pragmatic use as their finite clausal counterparts. These deficiencies result from the lack of morpho-syntactic, perhaps lexical, specifications which determine the respective range of applications. As a matter of fact, this type of root structures frequently used in discourse does receive an interpretation. This interpretation, however, is not restricted to the content that can
be established by means of composition from the impoverished lexical and morphological resources. While the literal meaning of the root structure provides the basis, the overall interpretation is enriched by the outcome of certain pragmatic inferences, which, partly at least, substitutes for the lack of lexical and morphological specification.

In German, which provides the empirical domain of the following reflections, non-finite infinitival verbs may form the predicate of root structures. (1) exemplifies two common possible occurrences.

(1) a. Was tun?  
    What do  
    ‘What is to be done / what shall I do’

b. Zuhören!  
    listen

It should be kept in mind that the term *infinitive* (in German linguistics) is used to refer to two partially differing forms. On the one hand there are bare infinitives (representing instances of the 1st status in the sense of Bech (1955)) and, on the other hand, *zu*-infinitives (Bech’s 2nd status). Non-finite non-interrogative roots are licitly formed with 1st status bare infinitives and, marginally, with *zu*-infinitives in the case of exclamatives.1 Interrogatives like (1a), however, are rigidly restricted to bare infinitives. As is well known, embedded occurrences of bare vs. *zu* infinitives are subject to differing selectional restrictions imposed by the licensing embedding predicate. *wh-*zu-infinitives, however, are rigidly excluded from complementation of any verb.2

---

1 Bare root infinitives:

(i) a. Vor dem Öffnen des Geräts den Netzstecker ziehen.  
    before the opening of the appliance the power plug pull  
    ‘Before opening the appliance pull out the power plug.’

b. Bloß nicht auffallen.  
    only not attract_attention  
    ‘Do not attract attention.’

c. So schön singen können.  
    so beautifully sing can  
    ‘If only I could sing so beautifully.’

2 Certain cases of pied piping do not weaken this claim:

(i) Man fragte mich, was zu speisen mir empfohlen worden sei.  
    one asked me what to eat me recommended was-subj  
    ‘I was asked what was recommended for dinner.’

---

2 Certain cases of pied piping do not weaken this claim:
Instances like (1a) are the topic of an investigation undertaken in Reis (2003). Against the background of the properties of root infinitives in German (like (1b)), Reis establishes a number of syntactic and interpretive properties of the wh-variant, which are summarized in (2) and (3) (cited from Reis (2003:156f.)).

(2) **wh**-infinitives:
   a. are true interrogatives,
   b. occur only in root positions,
   c. are based on bare infinitives.

(3) **wh**-infinitives:
   a. always have a non-past, prospective interpretation,
   b. always have a modal interpretation,
   c. restrict the referential interpretation of the subject to the speaker, or sets of referents including the speaker,
   d. are always interpreted as speaker-oriented, quasi deliberative questions, excluding any hearer-oriented information-seeking use.

I will not enter into a detailed discussion of the facts motivating the statements in (2) and (3) nor of the motivation itself – readers are referred to the aforementioned publication. However, I want to point out that the characterizations in (3) do not (totally) fit a specific variant of the wh-root infinitive construction. The case I refer to is instantiated by wh-infinitives formed with the interrogative elements *warum*, *wieso*, *weshalb/weswegen*, or *wozu*. Of course, root infinitives formed with these wh-elements may be interpreted according to the characterization in (3) as in the case of (4a), which is paraphrased by (4b).

(4) a. Warum/wieso/weshalb/wozu solch einem Flegel gefällig sein?  
   b. Warum/wieso/weshalb/wozu soll ich/man solch einem Flegel 
      obliging be  
      ‘Why should I/one be oblige to such a churl?’

The wh-infinitive does not form the complement of the matrix verb.

---

3 True is to be understood as referring to formal properties.

4 There is one remark to be made concerning (3c). Utterances like (i) are quite normal:

(i) *Was tun, wenn man nicht ein noch aus weiß?*  
   ‘What shall one do being at a loss?’

There is a strong tendency to identify the subject argument of the infinitive *tun* with the generic pronoun *man* in the conditional clause. (i) may also be uttered in the presence of an individual in a desperate situation who does not know what to do. However, even in such a case, the utterance does not lose its generic character and, hence, a speaker-including reading. It is, then, the speaker-excluding reading which is not possible in the case of a wh-infinitive characterized by (3). This fact has to be kept in mind in certain cases of *warum*-infinitives.
(4a), then, is a speaker-oriented deliberative question whether to help an ill-mannered rude individual at all. The prospective reading (cf. (3a)) is evident in this case. The modal interpretation (cf. (3b)), in particular, is properly paraphrased by choosing the modal verb *soll*, which expresses weak necessity.

However, instances like (5a) give rise to a second possible interpretation, paraphrased in (5b).

(5) a. Warum die Tür eintreten, (wenn sie doch gar nicht
why the door kick_in (when it Prt Prt not
verschlossen war)?
shut was

b. Warum musstest du die Tür eintreten...
why had_to you the door kick_in...
‘Why did you have to kick in the door...?’

(5a) may be uttered naturally by a speaker to address a hearer (who has just entered the room in the exceptional manner described by the verb), but not to address the speaker himself. In this case, the subject of the verb is undoubtedly identified with the addressee. The speaker himself is excluded from the set of actors. Finally, the action described by the infinitival verb has to have been executed before the utterance is made. The action and the utterance may coincide in time, but the utterance cannot precede the action. This interpretation is evoked by the situational context (and the possible continuation bracketed in (5a)). In these respects, the *warum*-variant differs drastically from all other types of *wh*-infinitives: for instance, an object-question corresponding to (5) is completely uninterpretable in the context of an already performed action:

(6) # Welche Tür eintreten, wenn sie doch gar nicht verschlossen war?
which door kick_in when it Prt Prt not shut was

*Warum*-infinitives crucially differ from all other instances of *wh*-infinitives with respect to the conditions expressed by (3a/c/d). The only aspect the *warum*-variant shares with the other cases of *wh*-root infinitives is its modal interpretation (which, however, is strengthened to strict necessity in the case of (5) expressed by the paraphrase with the modal verb *müssen* (cf. Reis 2003:176) and the lack of a genuine information-seeking intention on the part of the speaker.⁵

Besides an interpretation according to the conditions in (3) *warum*-root infinitives, then, provide a second reading which is characterized by the conditions listed in (7). (3) and (7) differ with respect to the values of the otherwise identical parameters.

⁵ As discussed in section 9.3, hearer-oriented *warum*-interrogatives do not completely lack an intention on the part of the speaker to get informed by the hearer, but this intention is weaker than in finite questions.
Warum-infinitives – in alternative to (3)

a. have a past, non-prospective interpretation,
b. always have a modal interpretation (strict necessity),
c. identify the hearer with the subject argument of the infinitive, excluding the speaker,
d. are interpreted as hearer-oriented.

Causal-interrogatives like (4) and (5) are already mentioned by Reis (2003) but not examined in any detail, presumably because of the differences compared to the other cases, illustrated by (1a).

Besides these characteristics, questions like (5a) have the flavour of targeting a reason or motivation for the action performed by the addressee which, however, is considered unacceptable from the outset by the speaker. In this respect, warum-infinitives resemble rhetorical questions. It might be tempting, therefore, to deduce the specific mode of interpretation that arises with examples like (5) from the properties of rhetorical questions in general. It will be shown in section 5, though, that such an approach is not promising.6

Warum-infinitives are obviously peculiar. While, in all instances, they observe the conditions listed in (2), they are in principle ambiguous with respect to the conditions in (3)/(7). Each of the two possible readings is established by a set of interpretative components, which cannot be combined arbitrarily.

(8) warum-infinitive

<table>
<thead>
<tr>
<th>Temporal interpretation:</th>
<th>prospective –</th>
<th>past/simultaneous –</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>non-past</td>
<td>non-prospective</td>
</tr>
<tr>
<td>Modality:</td>
<td>necessity</td>
<td>strong-necessity</td>
</tr>
<tr>
<td>Subject:</td>
<td>speaker-including</td>
<td>speaker-excluding</td>
</tr>
<tr>
<td>Orientation:</td>
<td>speaker</td>
<td>hearer</td>
</tr>
</tbody>
</table>

The two readings do not differ with respect to the parameters of interpretation but with respect to the specification of the respective values. The goal of the following

6 In a certain sense, warum-infinitives also resemble why-like what questions – surprise and disapproval questions in terms of Bayer & Obenauer (2011) – as they express disapproval by the speaker. This parallel, however, should not be overestimated. was may be substituted in the paraphrase (5b) of (5a) but it seems to be worse in the case of the infinitive itself.

(i) a. Was musstest du die Tür eintragen?
   what had_to you the door kick_in
   ‘Why did you have to kick in the door?’
   b. ?? Was die Tür eintreten (wenn sie doch nicht verschlossen war)?
      what the door kick_in if it Prt. not shut was

Furthermore, was instead of why at least strongly prefers the occurrence of the modal *muss* in (ia), (ii) are quite questionable candidates:

(ii) a. ?? Was hast du die Tür eingetreten?
      what have you the door kicked_in
   b. ?? Was tratest du die Tür ein?
      what kicked you the door in

As already pointed out by Reis (2003:166) these facts come under the wh-oddities.
analysis of the *warum*-variant of *wh*-root infinitives is to account for each of these specific aspects of interpretation as well as for their non-arbitrary combination.

In many cases the actual choice between the two options is subject to the situational context of the utterance. There are, nevertheless, certain syntactic and lexical conditions to be considered later which restrict the reading of a *warum*-root infinitive to one of the two alternatives.

Before turning to the main topic of investigation, viz. the structural and interpretative properties of the causal interrogative root infinitives, it is convenient to recall some general aspects of *wh*-root structures which are present in the *warum*-variant, as well.

2 The structure of *wh*-root structures...

Regarding the categorial specification of non-finite interrogatives, Reis (2003) identified the root node as a functional projection (FP) of a [+wh] head.

\[
(9) \quad [FP [wh-XP] [F' [[F [ [+] wh] ...]]]]
\]

This is motivated by obvious parallels to finite *wh*-clauses (including long-distance movement) concerning word order: the *wh*-phrase must precede the residual constituents of the infinitival phrase.\(^7\)

With respect to their inner structure, it should be noted that non-finite *wh*-root constructions apparently are not limited to infinitives. For instance, they also occur with PPs, DPs (cf. Reis 2003:171) and APs, instead of the infinitival verb. (10) shows instances of *wh*-argument phrases.

(10) a. Wohin mit dem Dreck?
     where_to with the dirt?
     ‘Where shall I put the dirt?’

b. Wohin das Zeug?
     where_to the stuff?
     ‘Where shall I put the stuff?’

c. Worüber so aufgeregt?
     about_what so upset?
     ‘What are you so upset about?’

However, some of these superficially verb-less cases can be traced back to structures involving a phonologically empty verbal predicate, this holds true at least for (10a/b) cf. Fortmann (forthcoming).

\(^7\) So, for instance, a single *wh*-phrase may *not* stay in situ:

(i) a. Womit sich den ganzen Abend lang beschäftigen?
     with_what oneself the whole evening occupy
     ‘What shall one do the whole night long?’

b. *Sich den ganzen Abend lang womit beschäftigen?
     oneself the whole evening with_what occupy