CASE COMPETITION IN HEADLESS RELATIVES

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ACC	accusative
DAT	dative
DEM	demonstrative
ELH	extra light head
F	feminine
GEN	genitive
INF	infinitive
M	masculine
NOM	nominative
N	neuter
PL	plural
PRES	present tense
PST	past tense
PTCP	participle
REL	relative marker
SG	singular

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Deriving the unrestricted type

In Chapter 6, I suggested that languages of the unrestricted type have two possible light heads, which are part of the derivation under different circumstances. The first possible light head derives the pattern correctly for for the situation in which cases match and the situation in which internal case is more complex than the external case. The second possible light head derives the pattern correctly for for the situation in which cases match and the situation in which external case is more complex than the internal case.

The first possible light head has the same internal syntax as the extra light head in internal-only languages, such as Modern German. It is spelled out by a portmanteau for phi and case features. The relative pronoun is spelled out by that same portmanteau plus a separate lexical entry that spells out the feature REL. This means that the internal syntax of light heads and relative pronouns looks as shown in Figure 9.1.

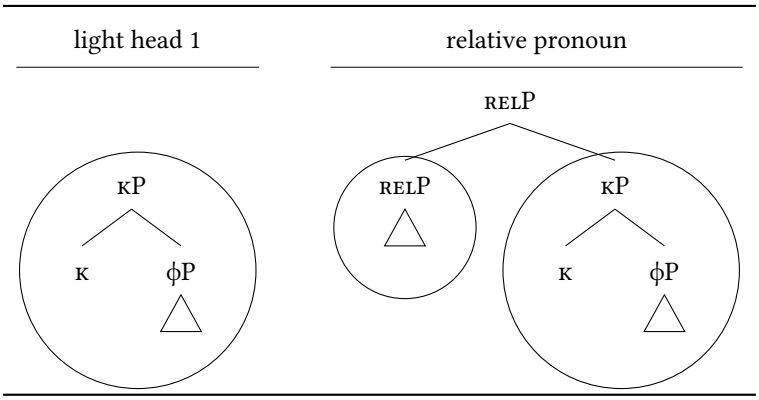


Figure 9.1: LH-1 and RP in the unrestricted type

These lexical entries lead to the grammaticality pattern shown in Table 9.1.

Consider first the situation in which the internal and the external case match. The situation here is identical to the one in the internal-only type of language. The light

Table 9.1: Grammaticality in the unrestricted type (part 1)

situation	lexical entries		containment	deleted	surfacing
	LH	RP			
$K_{INT} = K_{EXT}$	$[K_1[\phi]]$	[REL], $[K_1[\phi]]$	structure	LH	RP_{INT}
$K_{INT} > K_{EXT}$	$[K_1[\phi]]$	[REL], $[K_2[K_1[\phi]]]$	structure	LH	RP_{INT}
$K_{INT} < K_{EXT}$	[REL], $[K_1[\phi]]$	$[K_2[K_1[\phi]]]$	no	none	*

head consists of a phi and case feature portmanteau. The relative pronoun consists of the same morpheme plus an additional morpheme that spells out the feature REL. The lexical entries create a syntactic structure such that the light head is a constituent that is structurally contained within the relative pronoun. Therefore, the light head can be deleted, and the relative pronoun surfaces, bearing the internal case.

Consider now the situation in the internal case wins the case competition. Here the situation is identical to the one in the internal-only type of language too. The light head consists of a phi and case feature portmanteau. The relative pronoun consists of a phi and case feature portmanteau that contains at least one more case feature than the light head (K_2 in Figure 9.1) plus an additional morpheme that spells out the feature REL. The lexical entries create a syntactic structure such that the light head is a constituent that is structurally contained within the relative pronoun. Therefore, the light head can be deleted, and the relative pronoun surfaces, bearing the internal case.

Consider now the situation in the internal case wins the case competition. Also here the situation is identical to the one in the internal-only type of language. The relative pronoun consists of a phi and case feature portmanteau and an additional morpheme that spells out the feature REL. Compared to the relative pronoun, the light head lacks the morpheme that spells out REL, and it contains at least one more case feature (K_2 in Figure 9.1). The lexical entries create a syntactic structure such that neither the light head nor the relative pronoun is a constituent that is contained within the other element. Therefore, none of the elements can be deleted, and there is no headless relative construction possible.

In Chapter 4, I showed that Old High German is a language of the unrestricted type. In this chapter, I show that Old High German has light heads and relative pronouns of type of structure described in Figure 9.1. I give a compact version of the structures in Figure 9.2.

Consider the first possible light head in Figure 9.2. These light heads (i.e. phi and case features) in Old High German are spelled out by a single morpheme, indicated by the circle around the structure. They are spelled out as *ër* or *ën*, depending on which

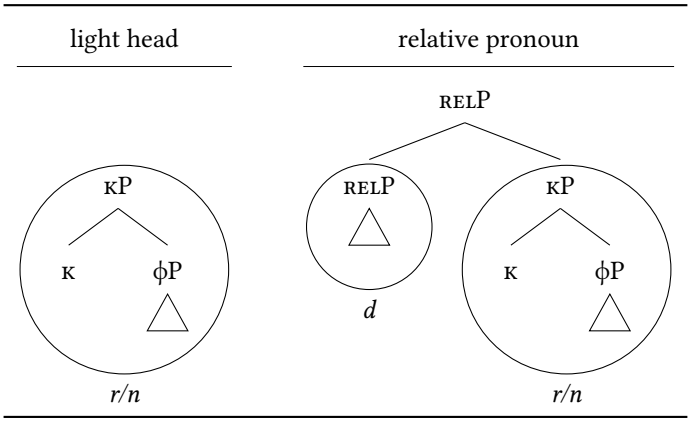


Figure 9.2: LH-1 and RP in Old High German

case they realize. Consider the relative pronoun in Figure 9.2. Relative pronouns in Old High German consist of two morphemes: the constituent that forms the light head (i.e. phi and case features) and the RELP, again indicated by the circles. The constituent that forms the light head has the same spellout as in the light head (*ën* or *m*), and the RELP is spelled out as *d*. Throughout this chapter, I discuss the exact feature content of light heads and relative pronouns, I give lexical entries for them, and I show how these lexical entries lead to the internal syntax of light heads and relative pronoun as shown in Figure 9.2.

The second possible light head differs from the first possible head in that it contains an additional feature X. The phi and case features are still spelled out by the phi and case portmanteau. The additional feature X is spelled out by its own lexical entry. The relative pronoun is spelled out by that same portmanteau plus a separate lexical entry that spells out the feature X and the feature REL. This means that the internal syntax of light heads and relative pronouns looks as shown in Figure 9.1.

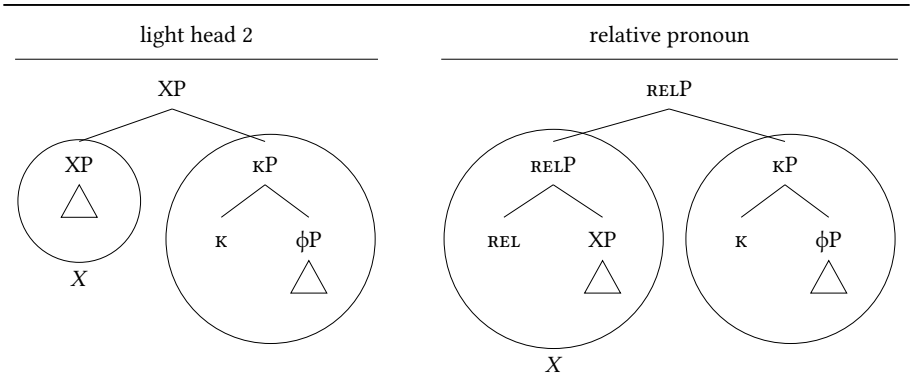


Figure 9.3: LH-2 and RP in the unrestricted type

These lexical entries lead to the grammaticality pattern shown in Table 9.2.

Table 9.2: Grammaticality in the unrestricted type (part 2)

situation	lexical entries		containment	deleted	surfacing
	LH-2	RP			
$K_{INT} = K_{EXT}$	*/X/*, */Y/*	*/X/*, */Y/*	form	RP	LH_{EXT}
$K_{INT} > K_{EXT}$	*/X/*, */Y/*	*/X/*, */Z/*	no	none	*
$K_{INT} < K_{EXT}$	*/X/*, */Y/*	*/X/*, */Y/*	form	RP	LH_{EXT}

Consider first the situation in which the internal and the external case match. The light head consists of a phi and case feature portmanteau plus a morpheme that spells out the feature X, which corresponds to phonological form *X*. The relative pronoun consists of the same phi plus case feature morpheme and a morpheme that spells out the feature X and the feature REL, which corresponds to the phonological form *X* too. The lexical entries create a syntactic structure such that the light head and the relative pronoun are syncretic, so they both form a constituent that is formally contained within the other element. Therefore, the one of the elements can be deleted, and the other one surfaces, bearing the internal and external case.

Consider now the situation in the internal case wins the case competition. The light head consists of a phi and case feature portmanteau plus a morpheme that spells out the feature X, which corresponds to phonological form *X*. The relative pronoun consists of a phi and case feature portmanteau that contains at least one more case feature than the light head (K_2 in Figure 9.2) plus a morpheme that spells out the feature X and the feature REL, which corresponds to the phonological form *X* too. The lexical entries create a syntactic structure such that neither the light head nor the relative pronoun is a constituent that is contained within the other element. Therefore, none of the elements can be deleted, and there is no headless relative construction possible.

Finally, consider the situation in which the external case wins the case competition. The relative pronoun consists of the same phi plus case feature morpheme and a morpheme that spells out the feature X and the feature REL, which corresponds to the phonological form *X*. Compared to the relative pronoun, the light head lacks the feature REL and only the feature X spells out as *X*, and it contains at least one more case feature (K_2 in Figure 7.1). The lexical entries create a syntactic structure such that neither the light head nor the relative pronoun is a constituent that is contained within the other element. Therefore, none of the elements can be deleted, and there is no headless relative construction possible. However, the derivation in which the external case is more complex than the internal one goes through a stage in which

the internal and the external case match. Therefore, at that stage, these lexical entries create a syntactic structure such that the light head and the relative pronoun are syncretic, so the relative pronoun forms a constituent that is formally contained within the light head. Therefore, the relative pronoun can be deleted, and the light head remains, bearing external case. Then, the remaining complex case features are merged to the light head, and the light head surfaces, bearing the more complex external case.

In Chapter 4, I showed that Old High German is a language of the unrestricted type. In this chapter, I show that Old High German has light heads and relative pronouns of type of structure described in Figure 9.3. The feature I so far called X is replaced here by D. I give a compact version of the structures in Figure 9.4.

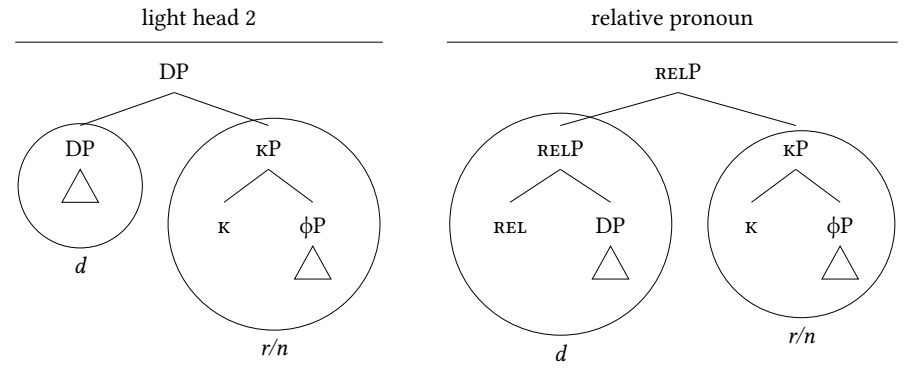


Figure 9.4: LH-2 and RP in Old High German

Consider the first possible light head in Figure 9.4. Light heads (i.e. the phi and case features and the feature D) in Old High German are spelled out by two morphemes, which are both circled. The feature D is spelled out as *d* and the phi and case features are spelled out as *ër* or *ën*, depending on which case they realize. Consider the relative pronoun in Figure 9.4. Relative pronouns in Old High German consist of two morphemes: the constituent that spells out phi and case features and the constituent that spells out the feature D and the feature REL, again indicated by the circles. The constituent that spells out phi and case features has the same spellout as in the light head (*ër* or *ën*), and the RELP is spelled out as the XP in the light head: as *d*. Throughout this chapter, I discuss the exact feature content of light heads and relative pronouns, I give lexical entries for them, and I show how these lexical entries lead to the internal syntax of light heads and relative pronoun as shown in Figure 9.4.

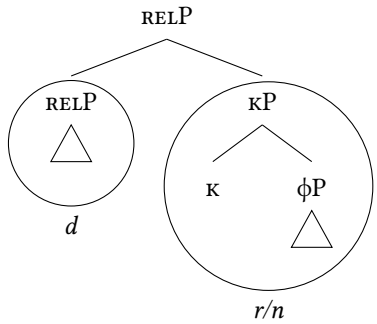
The chapter is structured as follows. First, I discuss the relative pronoun. I decompose it into the two morphemes I showed in Figure 9.2 and Figure 9.2. Then I show which features each of the morphemes corresponds to. Then I discuss the two

possible light heads. The first possible light head is one that does not surface as a light head in Old High German light-headed relatives, just as I argued for for Modern German and Polish. I show that the light head corresponds to one of the morphemes of the relative pronoun (the KP in Figure 9.2). The features that form the Old High German light head and relative pronoun are largely the same ones that form the Modern German light head and relative pronoun. The only difference in features is the the WH operator feature from Modern German and Polish relative pronouns is replaced by the feature D in Old High German. The second difference between the two languages is how the features are spelled out. The second possible head does surface as a light head in a Old High German light-headed relatives. This light head corresponds the KP in the relative pronoun plus the additional feature D (see Figure 9.4). The feature D is the only feature that is different in Old High German light heads compared to light heads in Modern German and Polish. Next, I compare the constituents of the light head and the relative pronoun. I show that the first possible light head can be deleted when the internal case and external case match and when the internal case is more complex than the external case via structural containment. The second possible light head can be deleted when the internal case and external case match and when the internal case is more complex than the external case via formal containment. In order to illustrate how this works, I need to make a few assumptions about the larger syntactic structure of headless relative clauses explicit.

9.1 The Old High German German relative pronoun

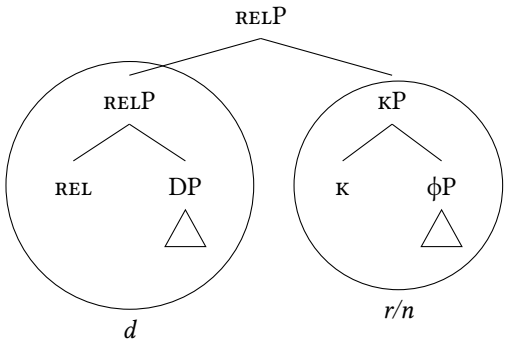
In the introduction of this chapter, I suggested in Figure 9.2 that the internal syntax of relative pronouns in Old High German looks as shown in (1).

(1)



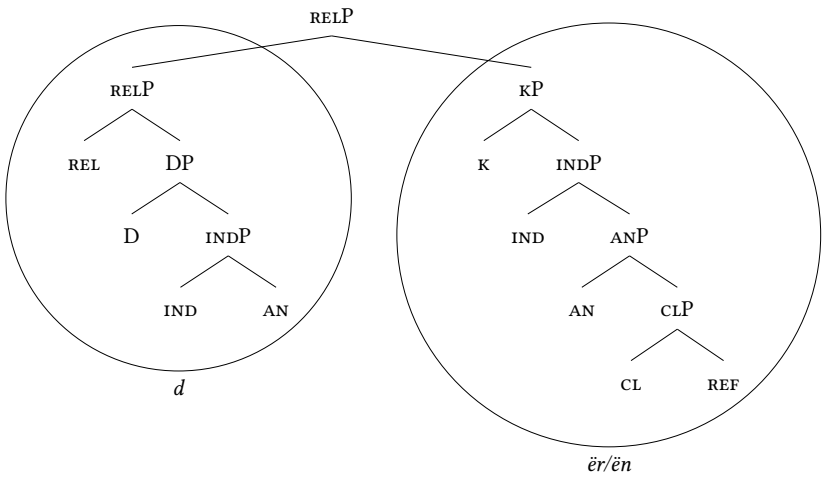
In Figure 9.2, I suggested that the internal syntax of relative pronouns in Old High German looks as shown in (2).

(2)



In this chapter, I show that both structures show the internal syntax of Old High German relative pronouns. The structure in (2) is just a bit more detailed version of (1). As I also showed in Chapter 7 for Modern German and in Chapter 8 for Polish, relative pronouns contain more features than only REL, ϕ and K. In this section, I show that Old High German relative pronouns consist of the same features, except for that the operator feature WH is replaced by the feature D. Still, the crucial claim I made in Chapter 6 remains unchanged: unrestricted languages (of which Old High German is an example) have a portmanteau for the features that correspond to phi and case features and a morpheme that spells out the features the first light head does not contain. I show the complete structure that I work towards in this section in (3).

(3)



I discuss two relative pronouns: the animate nominative and the animate accusative. These are the two forms that I compare the constituents of in Section 9.3. I show them in (4).

(4) a. d-ër
'RP.AN.NOM'

b. d-ën
'RP.AN.ACC'

I decompose the relative pronouns into two morphemes: the *d* and the final consonant (*ër* or *ën*). For each morpheme, I discuss which features they spell out, I give their lexical entries, and I show how I construct the relative pronouns by combining the separate morphemes.

I start with the suffixes: *ër* and *ën*. These two morphemes correspond to what I called the phi and case feature portmanteau in Chapter 6 and the introduction to this chapter. I argue that the phi features actually correspond to gender features, number features and pronominal features. Adding this all up, I claim that the final consonants correspond to number features, gender features, pronominal features and case features. Consider Table 9.3, which shows Old High German relative pronouns in two numbers, three genders and three cases.[1]

Table 9.3: Relative pronouns in Old High German (Braune 2018: 339)

	N.SG	M.SG	F.SG
NOM	d-az̨	d-ër	d-iu
ACC	d-az̨	d-ën	d-ea/d-ia
DAT	d-ëmu/d-ëmo	d-ëmu/d-ëmo	d-ëru/d-ëro
	N.PL	M.PL	F.PL
NOM	d-iu	d-ē/d-ea/d-ia/d-ie	d-eo/-io
ACC	d-iu	d-ē/d-ea/d-ia/d-ie	d-eo/-io
DAT	d-ēm/d-ēn	d-ēm/d-ēn	d-ēm/d-ēn

The suffixes in Table 9.3 change depending on number, gender and case. These different suffixes can be observed in several contexts besides relative pronouns. Table 9.4 gives an overview of the adjective *jung* 'young' in Old High German.

For some forms, the table gives two different forms, the first one being nominal inflection and the second one being pronominal inflection (Braune, 2018). The pronominal endings are the same as can be observed in the Table 9.3. Note here that the situation in Old High German is slightly from the one in Modern German, in which only the final consonant expresses gender, number and case features.

Besides gender, number and case features, I assume that the suffix also contains pronominal features. I do so not only because the suffix is called pronominal inflection (*Pronominalflexion*) in the literature (Braune 2018: 338), but also because

[1] *d* can also be written as *dh* and *th*, *ë* and *ē* can also be *e* and *é* (Braune 2018: 339).

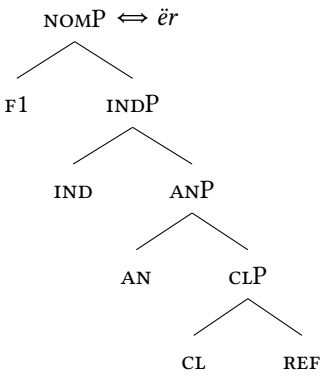
Table 9.4: Adjectives on *-a-/-ō-* in Old High German Braune 2018: 300

	N.SG	M.SG	F.SG
NOM	jung, jung-az	jung, jung-ēr	jung, jung-iu
ACC	jung, jung-az	jung-an	jung-a
DAT	jung-emu/jung-emo	jung-emu/jung-emo	jung-eru/jung-ero
	N.PL	M.PL	F.PL
NOM	jung-iu	jung-e	jung-o
ACC	jung-iu	jung-e	jung-o
DAT	jung-ēm/jung-ēn	jung-ēm/jung-ēn	jung-ēm/jung-ēn

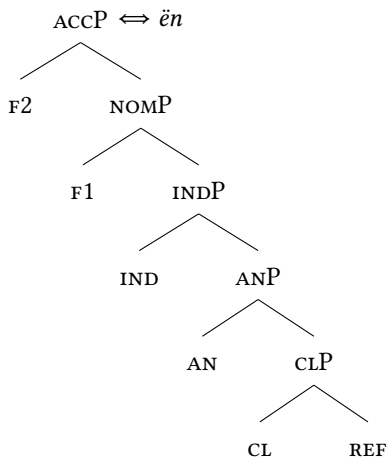
it appears in other pronominal forms too, such as possessives (Braune 2018: 337-338), demonstratives with the *dës*-stem (Braune 2018: 342) interrogatives (Braune 2018: 345).

I give the lexical entries for *ër* and *ën* in (5a) and (5b). The *ër* is the nominative masculine singular, so it spells out the features REF, CL, AN, IND and F1. The *ën* is the accusative masculine singular, so it spells out the features that the *ën* spells out plus F2.

(5) a.



b.

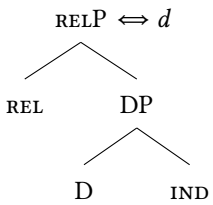


I continue with the morpheme *d*. This morpheme corresponds to what I called the REL-feature in Chapter 6 and in the introduction to this chapter. I argue that this morpheme actually spells out the feature REL, the feature D and number and gender features. Notice here that Old High German relative pronouns differ from Modern German and Polish relative pronouns in that they do not contain the operator feature WH. Instead, Old High German relative pronouns contain the feature D.

Relative and demonstrative pronouns are syncretic in Old High German (Braune 2018: 338). They contain the morpheme *d*, which is responsible for establishing a definite reference. The feature REL is present to establish a relation. I assume that *d* also contains the features IND. For this I do not have any independent support. I make this assumption to allow myself to build a complex specifier.

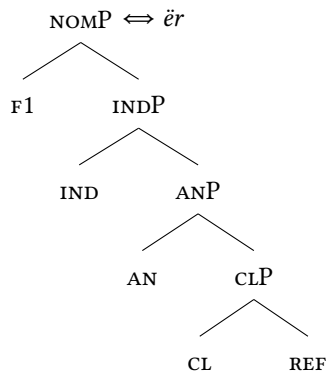
In sum, the morpheme *d* corresponds to the features D, REL and IND as shown in (6).

(6)

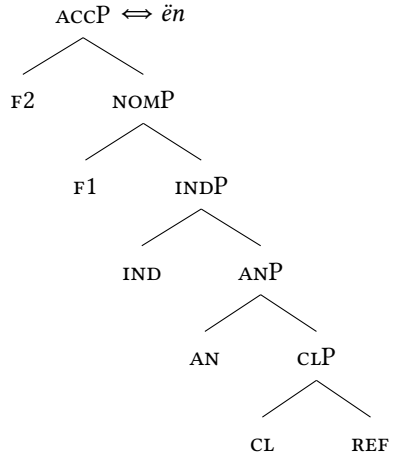


In what follows, I show how the Old High German relative pronouns are constructed. I follow the same functional sequence as I did for Modern German and Polish, except for substituting the feature WH by the feature D. Of course, the spellout procedure is identical. The outcome is different because of the different lexical entries Old High German has. I repeat the available lexical entries in (7).

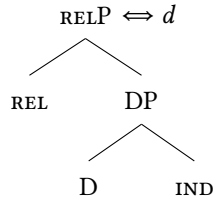
(7) a.



b.



c.



Starting from the bottom,

9.2 The Old High German light heads

9.2.1 The extra light head

Headless relatives in which the relative pronoun starts with a *d*, such as in Old High German, seem to be linked to individuating or definite readings and not to generalizing or indefinite readings (cf. Fuß, n.d.). I illustrate this with the two examples I repeat from Chapter 4.

Consider the example in (18), repeated from Chapter 4. In this example, the author refers to the specific person which was talked about, and not to any or every

person that was talked about.

(8) Thíz ist **then** **sie** **zéllent**
DEM.SG.N.NOM be.PRES.3SG$_{[NOM]}$ REL.SG.M.ACC 3PL.M.NOM tell.PRES.3PL$_{[ACC]}$
'this is the one whom they talk about'
not: 'this is whoever they talk about' (Old High German, Otfrid III 16:50)

Consider also the example in (18), repeated from Chapter 4. In this example, the author refers to the specific person who spoke to someone, and not to any or every person who spoke to someone.

(9) enti aer ant uurta demo **zaimo**
and 3SG.M.NOM reply.PST.3SG$_{[DAT]}$ REL.SG.M.DAT to 3SG.M.DAT
sprah
speak.PST.3SG$_{[NOM]}$
'and he replied to the one who spoke to him'
not: 'and he replied to whoever spoke to him'
(Old High German, Mons. 7:24, adapted from Pittner 1995: 199)

9.2.2 The light head

Old High German is special because the relative pronoun in its headless relatives is syncretic with the relative pronoun in its light-headed relatives.[2]

This light head story never works for Modern German or Polish because for them the relative pronoun and the light head are not syncretic.

Consider the light-headed relative in (10). *Thér* 'DEM.SG.M.NOM' is the head of the relative clause, which is the external element. *Then* 'RP.SG.M.ACC' is the relative pronoun in the relative clause, which is the internal element.

(10) eno nist thiz thér then ir
now not be.3SG DEM.SG.ËN.NOM DEM.SG.M.NOM RP.SG.M.ACC 2PL.NOM
suochet zi arslahanne?
seek.2PL to kill.INF.SG.DAT
'Isn't this now the one, who you seek to kill?'

I assume that whether both or only one of the elements surfaces is determined by information structure. In (10), the external element *thér* 'DEM.SG.M.NOM' is the candidate to be absent. However, it seems plausible that this is emphasized in this sentence and that it, therefore, cannot be absent.

[2]What about Modern German *der* - *der*? Modern German has two different relative pronouns, so there is actually the choice!

9.3 Comparing constituents

In this section, I compare the constituents of extra light heads and light heads to those of relative pronouns in Old High German. This is the worked out version of the comparisons in Section 6.2.3. What is different here is that I show the comparison for Old High German specifically, and that I motivated the content of the constituents that are being compared.

I give three examples, in which the internal and external case vary. I start with an example with matching cases, in which the internal and the external case are both nominative. I show that the grammaticality of the example can be derived by either taking the extra light head or by taking the light head as the present light head. Then I give an example in which the external accusative case is more complex than the internal nominative case. I show that the grammaticality of this example can only be derived by taking the light head as the present light head and not the extra light head. Before I can properly do that, I need to take a small detour into the larger syntactic structure of headless relatives. I end with an example in which the internal accusative case is more complex than the external nominative case. I show that the grammaticality of this example can only be derived by taking the extra light head as the present light head and not the light head.

I start with the situation in which the cases match. Consider the example in (11), in which the internal nominative case competes against the external nominative case. The relative clause is marked in bold. (11a) shows the example with the extra light head as the present light head and (11b) shows the example with the light head as the present light head. The internal case is nominative, as the predicate *senten* 'to send' takes nominative subjects. In both examples, the relative pronoun *dher* 'REL.SG.M.NOM' appears in the nominative case. The external case is nominative as well, as the predicate *queman* 'to come' also takes nominative subjects. In (11a), the extra light head *ër* 'ELH.SG.M.NOM' appears in the nominative case. It is placed between square brackets because it does not surface. In (11b), the light head *dher* 'DEM.SG.M.NOM' appears in the nominative case. Here the relative pronoun is placed between square brackets because it does not surface.

(11) a. quham [r] **dher** **chisendit**
come.PST.3SG$_{[NOM]}$ ELH.SG.M.NOM REL.SG.M.NOM send.PST.PTCP$_{[NOM]}$
scolda **uuerdhan**
should.PST.3SG become.INF
'the one, who should have been sent, came'
(Old High German, Isid. 35:5)

b. quham dher [**dher**] **chisendit**
come.PST.3SG$_{[NOM]}$ DEM.SG.M.NOM REL.SG.M.NOM send.PST.PTCP$_{[NOM]}$

scolda **uuerdhan**
should.PST.3SG become.INF
'the one, who should have been sent, came'
(Old High German, Isid. 35:5)

Both examples in (11) can be the light-headed relative clause that the headless relative is derived from. First I show the comparison of the two constituents for (11a) and then the one for (11b).

In Figure 9.5, I give the syntactic structure of the extra light head at the top and the syntactic structure of the relative pronoun at the bottom.

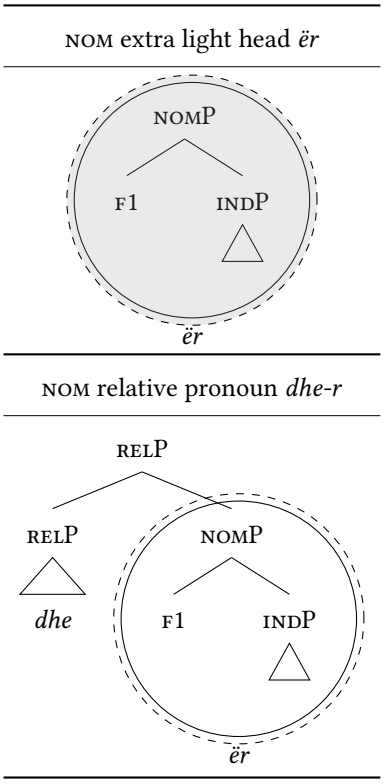


Figure 9.5: Old High German EXT_{NOM} vs. $\text{INT}_{\text{NOM}} \longrightarrow$ *dher* (ELH)

The relative pronoun consists of two morphemes: *dhe* and *ër*. The extra light head consists of a single morpheme: *ër*. As usual, I circle the part of the structure that corresponds to a particular lexical entry, and I place the corresponding phonology below it, or I reduce the structure to a triangle, and I place the corresponding phonology below it. I draw a dashed circle around each constituent that is a constituent in both the extra light head and the relative pronoun.

The extra light head consists of a single constituent: the NOMP. This NOMP is also a constituent within the relative pronoun. Therefore, the extra light head can be

deleted. I signal the deletion of the extra light head by marking the content of its circle gray.

In Figure 9.6, I give the syntactic structure of the light head at the top and the syntactic structure of the relative pronoun at the bottom.

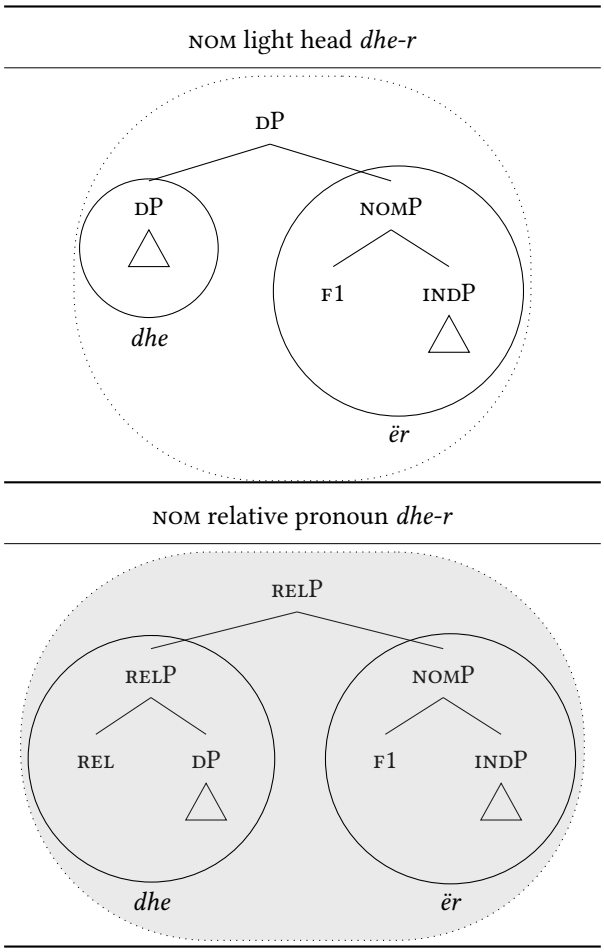


Figure 9.6: Old High German EXT_{NOM} vs. INT_{NOM} → *dher* (ELH)

The relative pronoun consists of two morphemes: *dhe* and *ër*. The light head also consists of two morphemes: *dhe* and *ër*. I circle the part of the structure that corresponds to a particular lexical entry, and I place the corresponding phonology below it, or I reduce the structure to a triangle, and I place the corresponding phonology below it. I draw a dotted circle around each constituent that is a constituent in both the light head and the relative pronoun.

The light head (the DP realized by *dher*) is syncretic with the relative pronoun (the RELP realized by *dher*). As the two forms are entirely syncretic, either the light head or the relative pronoun can be deleted. I delete the relative pronoun here, as

I discuss the situation in which the relative pronoun is deleted. I illustrate this by marking the content of the dotted circle for the relative pronoun gray.

The external case is nominative as well, as the predicate *queman* 'to come' also takes nominative subjects. In (11a), the extra light head *ër* 'ELH.SG.M.NOM' appears in the nominative case. It is placed between square brackets because it does not surface. In (11b), the light head *dher* 'DEM.SG.M.NOM' appears in the nominative case. Here the relative pronoun is placed between square brackets because it does not surface.

I continue with the situation in which the external case is the more complex one. Consider the examples in (12), in which the internal nominative case competes against the external accusative case. The relative clause is marked in bold. (12a) shows the example with the extra light head as the present light head and (12b) shows the example with the light head as the present light head. The internal case is nominative, as the predicate *gisizzen* 'to possess' takes nominative subjects. In both examples, the relative pronoun *dher* 'REL.SG.M.NOM' appears in the nominative case. The external case is accusative, as the predicate *bibringan* 'to create' takes accusative objects. In (12a), the extra light head *ën* 'ELH.SG.M.ACC' appears in the accusative case. It is placed between square brackets because it does not surface. In (12b), the light head *dhen* 'DEM.SG.M.ACC' appears in the accusative case. Here the relative pronoun is placed between square brackets because it does not surface.

(12) a. *ih bibringu fona iacobes samin endi fona
1SG.NOM create.PRES.1SG$_{[ACC]}$ of Jakob.GEN seed.SG.DAT and of
iuda [n] **dher** **mina**
Judah.DAT REL.SG.M.ACC my.ACC.M.PL mountain.ACC.PL
berga **chisitzit**
possess.PRES.3SG$_{[NOM]}$
'I create of the seed of Jacob and of Judah the one, who possess my mountains' (Old High German, Isid. 34:3)

b. ih bibringu fona iacobes samin endi fona
1SG.NOM create.PRES.1SG$_{[ACC]}$ of Jakob.GEN seed.SG.DAT and of
iuda dhen [**dher**] **mina**
Judah.DAT REL.SG.M.ACC my.ACC.M.PL mountain.ACC.PL
berga **chisitzit**
possess.PRES.3SG$_{[NOM]}$
'I create of the seed of Jacob and of Judah the one, who possess my mountains' (Old High German, Isid. 34:3)

Only (12b) can be the light-headed relative that the headless relative is derived from. First I show by comparing the constituents that no headless relative can be derived

from the (12a). Then I show the comparison of the two constituents for (12b), which does derive a grammatical result.

In Figure 9.7, I give the syntactic structure of the extra light head at the top and the syntactic structure of the relative pronoun at the bottom.

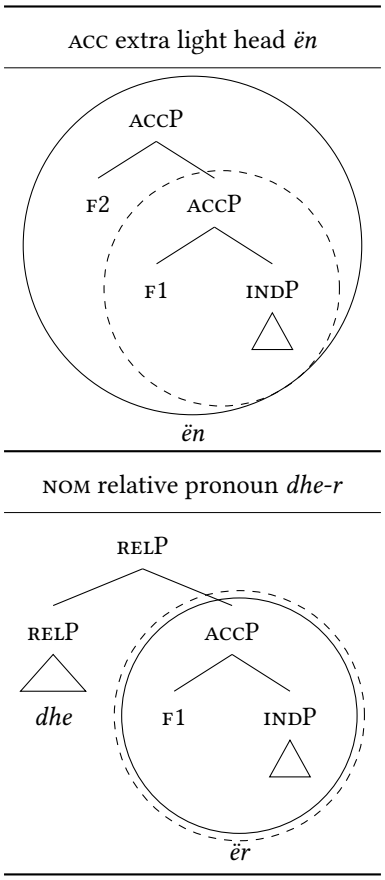


Figure 9.7: Old High German EXT_{ACC} vs. $\text{INT}_{\text{NOM}} \not\rightarrow$ *ën*/*dher* (ELH)

The relative pronoun consists of two morphemes: *dhe* and *ër*. The extra light head consists of a single morpheme: *ën*. Again, I circle the part of the structure that corresponds to a particular lexical entry, and I place the corresponding phonology below it, or I reduce the structure to a triangle, and I place the corresponding phonology below it. I draw a dashed circle around each constituent that is a constituent in both the extra light head and the relative pronoun.

The extra light head consists of a single constituent: the ACCP. In this case, the relative pronoun does not contain this constituent. The relative pronoun only contains the NOMP, and it lacks the F2 that makes a ACCP. Since the weaker feature containment requirement is not met, the stronger constituent containment requirement cannot be met either. The extra light head also does not contain all constituents or

features that the relative pronoun contains, because it lacks the complete constituent and RELP. Therefore, the extra light cannot be deleted, and the relative pronoun cannot be deleted either.

In what follows, I show that the light-headed relative that contains the light head is the structure that the headless relative is derived from. I cannot show this by directly comparing the constituents that the light head and the relative pronoun consist of. I need to make some assumptions I am making regarding the larger syntactic structure explicit. Before I do that, and I derive the grammatical result, I show that a direct comparison of the light head and the relative pronoun does not lead to a grammatical result.

In Figure 9.8, I give the syntactic structure of the light head at the top and the syntactic structure of the relative pronoun at the bottom.

this does not work, but the example is grammatical! so by simply comparing the two, we're not gonna get there

as I already alluded to in the basic idea, there is a stage in the derivation, in which the two cases are both nominative, and on that moment, the relative pronoun is deleted

if we start talking about 'stages in the derivation' we need to know more about the derivation. So far, I have only be talking about the light head and the relative pronoun separately. I have not placed them in a larger syntactic structure. For the discussion so far that has also not been relevant: whatever is going on, it is the same for all languages.

now that I need to make reference to a stage in the derivation, we need to know what the larger syntactic structure looks like.

I assume that a syntactic structure of a light-headed relative looks as in X[3]

(13) here an example of a high D and the relative clause below it

There is a D, which appears higher in the structure than the relative clause, etc. etc.

[3]I actually assume that a light-headed relative with an extra light looks as in X

(i) here an example with a non-D with the head in the low position

here explain what is in the example. This is also what Cinque says: non-definite heads are low, and definite heads are high. Two questions follow from such an analysis: (1) how do the case features end up down there, and (2) what triggers the movement of the light head to the higher position. About (1), Cinque says that it is feature percolation, and I follow that intuition. Technically, what's happening is backtracking, opening up the different workspaces, which leads to the case features finding a match on the element to the left of the relative clause. Concerning (2), Cinque says it's movement, I'm not sure what it's triggered by. I don't know what it is. If it's movement, then it can be triggered by spellout or by features. I don't see how either of them should work. It could be connected to the formation of a complex spec. It seems that as soon the spec is there, the light head also moves up, and the complex spec does not attach to the relative clause. I leave this for future research.

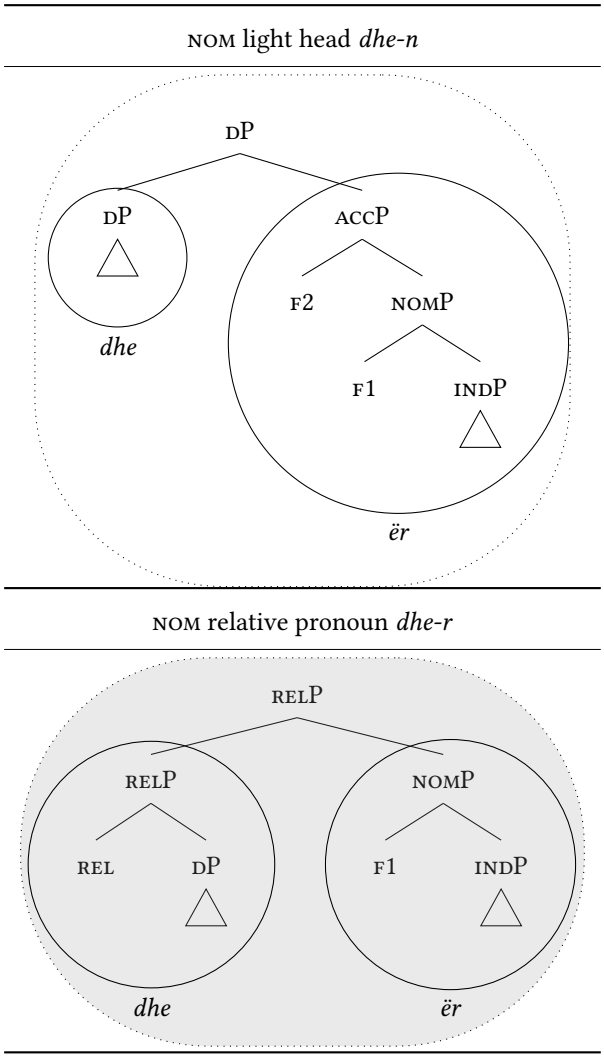


Figure 9.8: Old High German EXT_{ACC} vs. INT_{NOM} ⇀ *dhen*/*ther* (LH)

explanation the relative clause is already complete, including case features This structure for light-headed relatives is also assumed by cf. Cinque etc. etc. the features that are merged last in building a light head are the case features. first we have a D without case features, and then the case features are merged on by one. this means that we have a stage in the dervation dathat looks like:

(14) no cases, including relative pronoun and relative clause

(15) only nominative case

now there's deletion!

then we merge the next case feature, and we get a more complex external case

note that we also have c-command for the deletion! great![4]

- ext wins doesn't work, so first larger syntactic structure: head needs to be up there, for instance cinque (he also says we need to have it up there) then: yes, at some point in the derivation, and then merge the k2

I continue with the situation in which the internal case is the more complex one. Consider the example in (17), in which the internal accusative case competes against the external nominative case. The relative clause is marked in bold. The internal case is accusative, as the predicate *zellen* 'to tell' takes accusative objects. The relative pronoun *then* 'REL.SG.M.ACC' appears in the accusative case. This is the element that surfaces. The external case is nominative, as the predicate *sin* 'to be' takes nominative objects. The light head *ër* 'ELH.SG.M.NOM' appears in the nominative case. It is placed between square brackets because it does not surface.

(16) Thíz ist [r] **then** **sie**
DEM.SG.N.NOM be.PRES.3SG$_{[NOM]}$ DEM.SG.M.NOM REL.SG.M.ACC 3PL.M.NOM
zéllent
tell.PRES.3PL$_{[ACC]}$
'this is the one whom they talk about' (Old High German, Otfrid III 16:50)

(17) Thíz ist ther [**then**] **sie**
DEM.SG.N.NOM be.PRES.3SG$_{[NOM]}$ DEM.SG.M.NOM REL.SG.M.ACC 3PL.M.NOM
zéllent
tell.PRES.3PL$_{[ACC]}$
'this is the one whom they talk about' (Old High German, Otfrid III 16:50)

In Figure 9.9, I give the syntactic structure of the extra light head at the top and the syntactic structure of the relative pronoun at the bottom.

The relative pronoun consists of two morphemes: *the* and *ën*. The extra light head consists of a single morpheme: *ër*. Again, I circle the part of the structure that corresponds to a particular lexical entry, and I place the corresponding phonology below it, or I reduce the structure to a triangle, and I place the corresponding phonology below it. I draw a dashed circle around each constituent that is a constituent in both the extra light head and the relative pronoun.

The extra light head consists of a single constituent: the NOMP. This NOMP is also a constituent within the relative pronoun. Therefore, the extra light can be deleted. I signal the deletion of the extra light head by marking the content of its circle gray.

[4] coming back the extra light head, we also have c-command there, under the defininteino of kayne

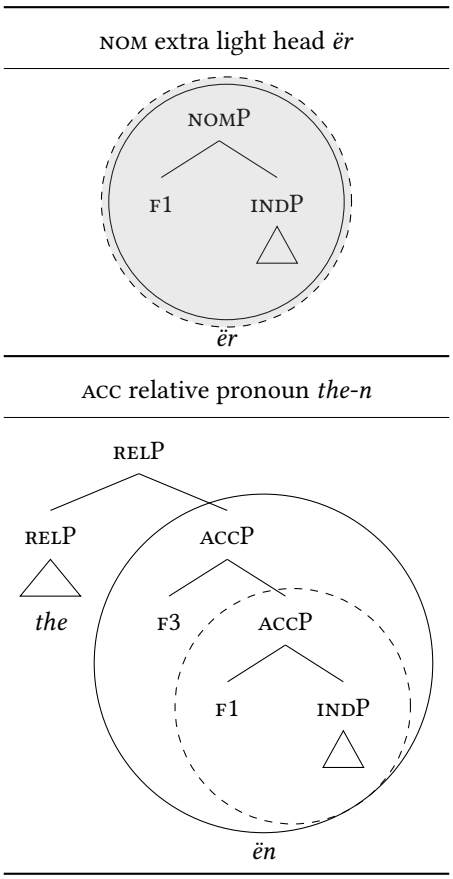


Figure 9.9: Old High German EXT_{NOM} vs. INT_{ACC} ⟶ *then*

9.4 Possible predictions

- possible prediction: ext>int = def, int>ext = wh, not what we see, show 4 examples

Consider the example in (18), repeated from Chapter 4. In this example, the author refers to the specific person which was talked about, and not to any or every person that was talked about.

(18) Thíz ist **then** **sie** **zéllent**
DEM.SG.N.NOM be.PRES.3SG$_{[\text{NOM}]}$ REL.SG.M.ACC 3PL.M.NOM tell.PRES.3PL$_{[\text{ACC}]}$
'this is the one whom they talk about'
not: 'this is whoever they talk about' (Old High German, Otfrid III 16:50)

Consider also the example in (18), repeated from Chapter 4. In this example, the author refers to the specific person who spoke to someone, and not to any or every person who spoke to someone.

(19) enti aer ant uurta demo **zaimo**
and 3SG.M.NOM reply.PST.3SG$_{[DAT]}$ REL.SG.M.DAT to 3SG.M.DAT
sprah
speak.PST.3SG$_{[NOM]}$
'and he replied to the one who spoke to him'
not: 'and he replied to whoever spoke to him'
(Old High German, Mons. 7:24, adapted from Pittner 1995: 199)

Primary texts

Isid. Der althochdeutsche Isidor

Mons. The Monsee fragments

Otfrid Otfrid's Evangelienbuch

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