CASE COMPETITION IN HEADLESS RELATIVES

Inauguraldissertation

zur Erlangung des Grades eines Doktors der Philosophie

im Fachbereich Neuere Philologien

der Johann Wolfgang Goethe-Universität

zu Frankfurt am Main

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Acknowledgements

thanks

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List of abbreviations

ACC	accusative
F	feminine
INAN	inanimate
NOM	nominative
PL	plural
PRES	present tense
REL	relative marker
SG	singular

Part I

Case competition

Part II

The typology

Part III

Deriving the typology

Chapter 6

The basic idea

In Chapter 4 I introduced two descriptive parameters that generate the attested languages, as shown in Figure 6.1.
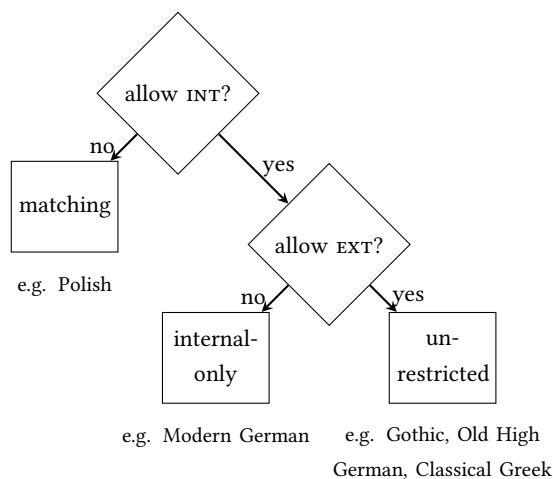
Figure 6.1: Two descriptive parameters generate three language types

The first parameter concerns whether the external case is allowed to surface when it wins the case competition (allow EXT?). This parameter distinguishes unrestricted languages (e.g. Old High German) from internal-only languages (e.g. Modern German) and matching languages (e.g. Polish). = actually ϕ + κ portmanteau The second parameter concerns whether the internal case is allowed to surface when

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it wins the case competition (allow INT?). This parameter distinguishes internal-only languages (e.g. as Modern German) from unrestricted languages (e.g. Old High German). = RP + LH syncretism

"A natural question at this point is whether this typology needs to be fully stipulative, or is to some extent derivable from independent properties of individual languages" Grosu (2003)147

I propose that the typology can be derived from the morphology of the languages. first, basic assumptions in place then, show where the crosslingustic differences come from then show how they lead to differences

6.1 Underlying assumptions

I start with my assumption that headless relatives are derived from light-headed relatives.[1] The light head bears the external case, and the relative pronoun bears the internal case, as illustrated in (1).

(1)   light head$_{\text{EXT}}$ [RP$_{\text{INT}}$ …]

In a headless relative, either the light head or the relative pronoun is absent.

To see what a light-headed relative looks like, consider the Old High German light-headed relative in (2). The relative clause, including the relative pronoun, is marked in bold. *Thér* 'LH.SG.M.NOM' is the light head of the relative clause. This is the element that appears in the external case, the case that reflects the grammatical role in the main clause. *Then* 'RP.SG.M.ACC' is the relative pronoun in the relative clause. This is the element that appears in the internal case, the case that reflects the grammatical role within the relative clause.

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[1]The same is argued for headless relatives with D-pronouns in Modern German by Fuß and Grewendorf 2014; Hanink 2018 and for Polish by Citko 2004. A difference with Modern German and Polish is that one of the elements can only be absent when the cases match. In Chapter 10 I return to the point why Modern German does not have unrestricted headless relatives that look like Old High German, although it still has syncretic light heads and relative pronouns.

Several others claim that headless relatives have a head, but that it is phonologically empty, cf. Bresnan and Grimshaw 1978; Groos and van Riemsdijk 1981; Himmelreich 2017.

(2)   eno nist   thiz   thér   **then**   **ir**   **suochet**

now not be.3SG DEM.SG.N.NOM LH.SG.M.NOM RP.SG.M.ACC 2PL.NOM seek.2PL

zi arslahanne?

to kill.INF.SG.DAT

'Isn't this now the one, who you seek to kill?'

The difference between a light-headed relative and a headless relative is that in a headless relative either the light head or the relative pronoun does not surface. The surfacing element is the one that bears the winning case, and the absent element is the one that bears the losing case. This means that what I have so far been glossing as the relative pronoun and calling the relative pronoun is actually sometimes the light head (when the relative pronoun is deleted) and sometimes the relative pronoun (when the light head is deleted). To reflect that, I call the surfacing element from now on the surface pronoun.

This brings me to my second assumption, which concerns the circumstances under which the light head or the relative pronoun can be deleted. A light head or a relative pronoun can be deleted when its content can be recovered. The content can be recovered when there is an antecedent which contains the deleted element. More specifically, the deleted element needs to form a single constituent within the antecedent.[2]

For light heads and relative pronouns this means that one of them can be absent when they form a constituent within the other element.[3] In other words, it depends on the comparison between the light head and the relative pronoun themselves which one of them is absent. Specifically, it depends on the comparison of the constituents that the two elements consist of. Note that it is also possible that neither of the elements form a constituent within the other one. The consequence

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[2]In Section 6.2.2 I show that constituent containment is also a necessary requirement is other types of deletion operations.

[3]Throughout this chapter I elaborate further on the exact requirements for constituent containment. There are namely two types of constituent containment possible. The first one is structural constituent containment: an element can be absent if it structurally forms a constituent within the other element. I elaborate on this in Section 6.2.2. The second one is formal constituent containment: an element can be absent if its form is syncretic with a constituent within the other element. I elaborate on this in Section 6.2.3.

is then that neither of them is deleted, which describes the situation in which there is no grammatical headless relative.

I continue with my third assumption. In order to be able to compare the light head and the relative pronoun, I zoom in on their syntactic structures. In Chapter 7 to 9 I give arguments to support the structures I am assuming here. Figure 6.2 gives a simplified representation of the light head and the relative pronoun.

light head	relative pronoun

                                           RELP
                                          /   \
              κP   REL   κP
             / \   / \
           κ   ϕP   κ   ϕP
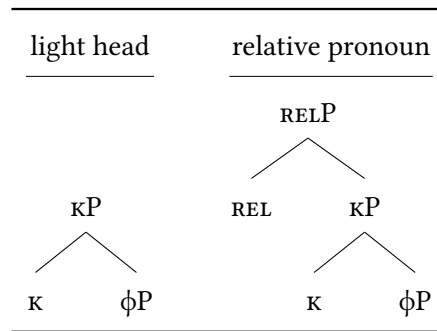
Figure 6.2: LH and RP

I assume that the light head and the relative pronoun partly contain the same syntactic features. The features they have in common are case features (κ) and what I here simplify as phi-features (ϕ). The light head and the relative pronoun differ from each other in that the relative pronoun has at least one feature more, which I call here REL.

The three assumptions I just introduced hold for all language types I discuss. In all language types, headless relatives are derived from light-headed relatives. For all language types, the deletion operation requires constituent containment. In all language types, the relative pronoun consists of the features of the light head plus at least one additional feature. The difference between languages does not come from modifying these assumptions in any way, but from how different languages package their features into constituents. Before I explain how differences in constituency lead to different grammaticality patterns, I show how differences in constituency arise.

In Chapter 3 I discussed the third person singular feminine pronoun in German. I repeat the lexical entry I gave for it in **??**.

(3) ACCP ⟺ *sie*

```
          ACCP
         /    \
        F2    NOMP
             /    \
            F1   3SG.FP
                   △
```
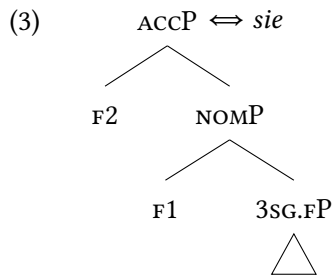
This means that the syntactic structure in (4) is spelled out as *sie*.

(4)

```
        ACCP
       /    \
      F2    NOMP
           /    \
          F1   3SG.FP
                 △
         sie
```
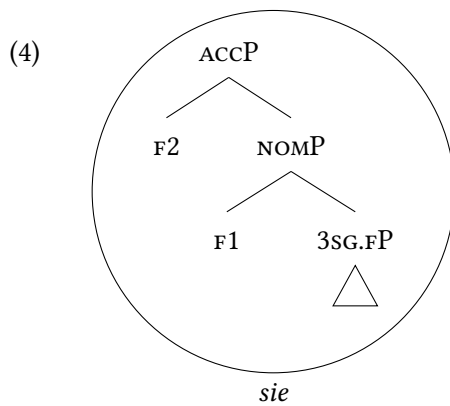
The third person singular feminine plural consists of a single constituent.

The situation is different for the third person singular pronoun in Khanty, which I also showed in Chapter 3. In Khanty, there is not a single lexical entry that spells out all features that the German lexical entry in (3) spells out. Instead, the same features are realized by two separate lexical entries, shown in (5).

(5)   a.   NOMP ⟺ *luw*

```
        NOMP
       /    \
      F1    3SGP
              △
```

b.   ACCP ⟺ *e:l*
           |
          F2
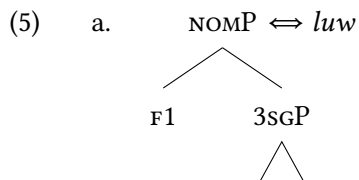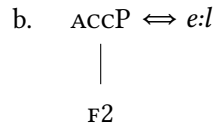
Nanosyntax only allows constituents to be spelled out, which means that in order to spell out the ACCP, the NOMP needs to be moved out of the way first.[4] The syntactic structure of the accusative third person singular pronoun in Khanty looks as in (6).

(6)   ACCP
              ╱   ╲
        NOMP   ACCP
         △ |
        luw   F2
                      e:l
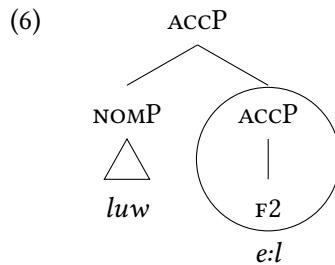
Now compare the syntactic structures of the German accusative pronoun in (4) and the Khanty one in (6). The feature content is the same (except for the feminine feature, which does not play a role here), but the constituents look different. This change in constituency is a direct consequence the lexical entries that are available within the language.

Exactly this type of difference is what is going to lead to the different grammaticality patterns in headless relatives. Languages contain different lexical entries which spell out features of the light head and the relative pronoun. The different lexical entries lead to differences in constituency. The different constituents lead to differences in whether or the light head and the relative pronoun can be deleted. Lastly, whether or not the light head and the relative pronoun can be deleted lead to different grammaticality patterns.

In sum, I assume that headless relative clauses are derived from light-headed relatives. Light-headed relatives contain a light head and relative pronoun. In a headless relative either the light head or the relative pronoun is deleted. The necessary requirement for deletion is that the deleted element (either the light head or

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[4]The movement operation is part of the spellout algorithm in Nanosyntax, which is the same for all languages. I elaborate on this spellout algorithm in Chapters 7 and 8.

relative pronoun) forms a constituent within the other element. Light heads and relative pronouns contain the same features, and that the relative pronoun contains one feature more: REL. The difference between grammaticality patterns in languages arise from languages having different lexical entries that spell out the features of the light head and the relative pronoun. The different lexical entries lead to differences in constituency, which lead to differences in deletion possibilities, which lead to different grammaticality patterns.

6.2 The three language types

In Chapter 4 I discussed three different language types. In this section I broadly sketch the kind of lexical entries these language types have that ultimately lead to them being of these types. For each language type I start with describing the kind of lexical entries they have, and I show the constituent the light head and the relative pronoun have because of that.[5] For each language type, I compare the constituents of the light head and the relative pronoun (i) when the cases on the light head and the relative pronoun match, (ii) when the relative pronoun bears the more complex case, and (iii) when the light head bears the more complex case. I show that with the constituents I proposed the light head and the relative pronoun can or cannot be deleted in these different situation in accordance with what is expected in the given language type.

6.2.1 The internal-only type

I start with the internal-only type of language. Consider the light head and the relative pronoun in this type of language in Figure 6.3.

The light head is spelled out by a single lexical entry, indicated by the circle around the KP. This lexical entry is a portmanteau of a phi- and case-features. The relative pronoun is spelled out by two lexical entries, indicated by the circles around the KP and the RELP. The phi- and case-features of the relative pronoun are spelled

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[5]In this chapter I do not motivate the lexical entries I propose. In chapters 7 to ?? I take a concrete example for each language type and I work out in detail and I show evidence for the lexical entries I am proposing.
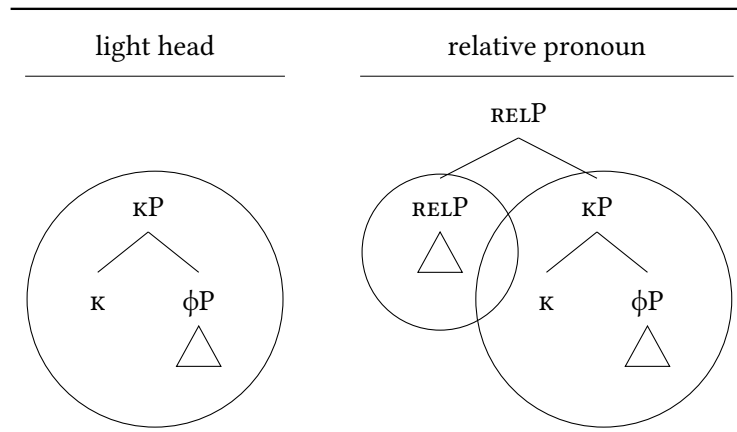
Figure 6.3: ʟʜ and ʀᴘ in the internal-only type

out by the same portmanteau as the light head is. The ʀᴇʟP is spelled out by a separate lexical entry. Chapter 7 motivates this analysis for the internal-only type of language Modern German.

In Figure 6.4, I give an example in which the relative pronoun and the light head bear the same case.

Figure 6.4: ᴇxᴛ_{ɴᴏᴍ} vs. ɪɴᴛ_{ɴᴏᴍ} in the internal-only type

I draw a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun. The light head (the ɴᴏᴍP) forms a constituent within the relative pronoun (the ʀᴇʟP), so the light head can be deleted. I illustrate

this by marking the content of the dashed circles for the light head gray. As the light head is deleted, the headless relative surfaces with the relative pronoun that bears the internal case.

In Figure 6.5, I give an example in which the relative pronoun bears a more complex case than the light head.

Figure 6.5: EXT_{NOM} vs. INT_{ACC} in the internal-only type

I draw a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun. The light head (the NOMP) still forms a constituent within the relative pronoun (the RELP), so the light head can be deleted. I illustrate this by marking the content of the dashed circles for the light head gray. As the light head is deleted, the headless relative surfaces with the relative pronoun that bears the internal case.

In Figure 6.6, I give an example in which the light head bears a more complex case than the relative pronoun.

I draw a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun. Different from the examples in Figure 6.4 and 6.6, the light head does not form a constituent within the relative pronoun. The NOMP of the light head forms a constituent within the relative pronoun, but the relative pronoun does not contain the feature F2 that forms an ACCP. The NOMP
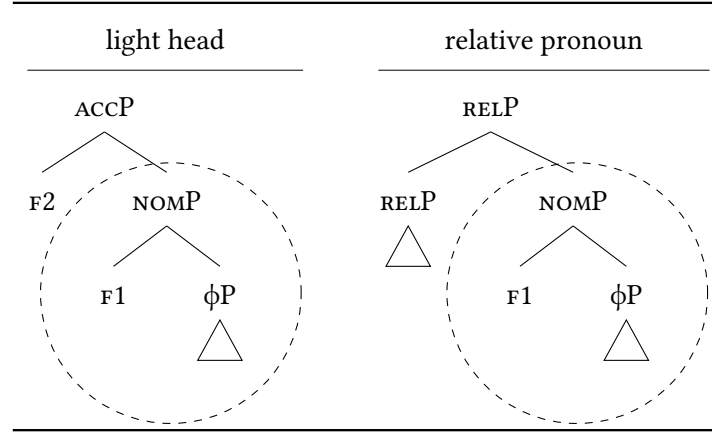
Figure 6.6: EXT$_{ACC}$ vs. INT$_{NOM}$ in the internal-only type

of the relative pronoun forms a constituent within the relative pronoun, but the light head does not contain the feature REL that forms a RELP. As a result, none of the elements can be absent. I illustrate this by leaving the content of both dashed circles unfilled. As none of the items is deleted, there is no grammatical headless relative possible.

The comparisons between the light head and the relative pronoun in different cases correctly the derive the observed patterns in internal-only languages. An overview of the patterns is shown in Table 6.1.

Table 6.1: Grammaticality in the internal-only type

	surface pronoun
$K_{INT} = K_{EXT}$	RP$_{INT/EXT}$
$K_{INT} > K_{EXT}$	RP$_{INT}$
$K_{INT} < K_{EXT}$	*

Headless relatives in internal-only languages are grammatical when the internal and the external case match and when the internal case is more complex than the external case. In these situations, the light head forms a constituent within the relative pronoun, and the light head is deleted. Headless relatives are ungrammati-

cal when the external case is more complex than the internal case, because then the
light head no longer forms a constituent within the relative pronoun.

6.2.2 The matching type

I continue with the matching type of language. In this type of language, the con-
stituency is as shown in Figure 6.7.
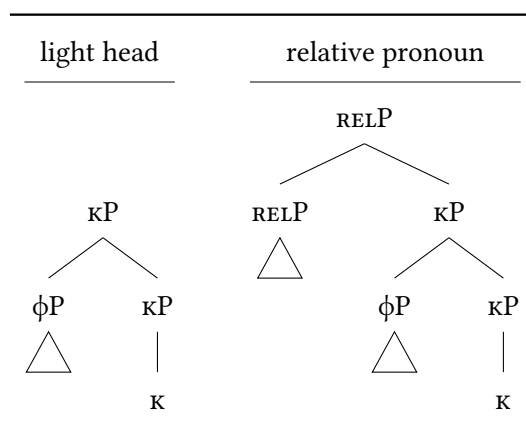
Figure 6.7: LH and RP in the matching type

Like in the internal-only type of language, the RELP has its own spellout and
is merged as a prefix. The difference between the two language types lies in how
the φP and the κP are spelled out. In the matching type of language, the φP and
the κP both correspond to a morpheme, which means that they both form separate
constituents. As a result, the φP is moved over the κP (allowing the κP to form
a constituent on its own, as only constituents can be spelled out). This crucially
differs from the internal-only type of language, in which κP and φP are spelled out
a by a single morpheme and no movement is taking place. In this section I show
how this difference leads to different deletion possibilities and, therefore, to different
grammaticality patterns. In Chapter 8, I motivate this analysis I put forward for the
matching type of language.

In Figure 6.8, I give an example in which the light head and the relative pronoun
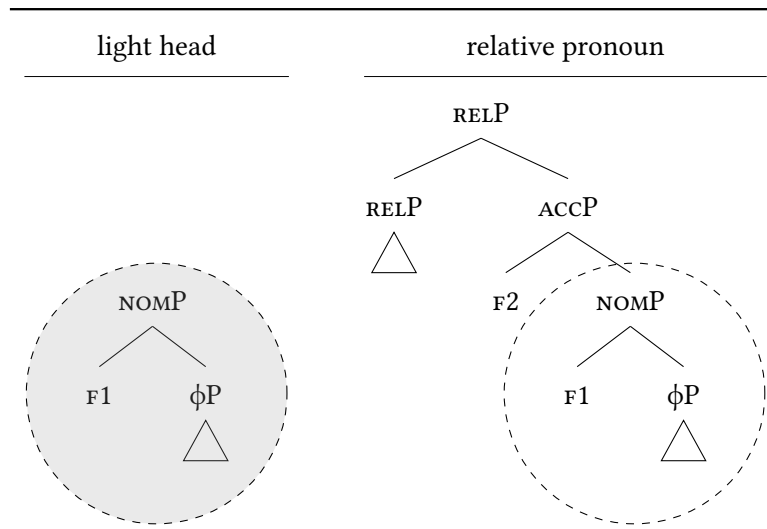bear the same case.
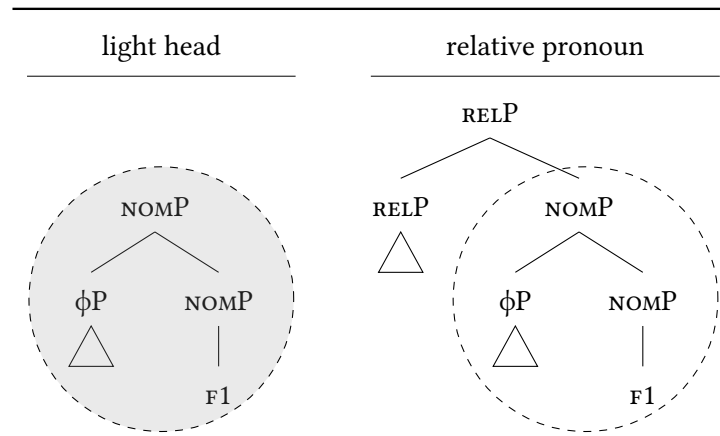
Figure 6.8: EXT_{NOM} vs. INT_{NOM} in the matching type

I draw a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun. In this instance it is no problem that the ϕP has moved over the NOMP. The light head (the NOMP) still forms a constituent within the relative pronoun (the RELP), so the light head can be deleted. I illustrate this by marking the content of the dashed circles for the light head gray.

In Figure 6.9, I give an example in which the relative pronoun bears a more complex case than the light head.

I draw a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun. The light head (the NOMP) no longer forms a constituent within the relative pronoun (the RELP). Therefore, the relative pronoun cannot delete the light head, which I illustrate by leaving the content of both dashed circles unfilled. It shows that in this instance it is a problem the ϕP has moved over the NOMP or ACCP.

Something else the example shows is the necessity to formulate the proposal in terms of constituent containment instead of feature containment. To illustrate the difference, I show the example from the internal-only type in which the relative pronoun could delete the light head in Figure 6.10, repeated from 6.5.

In Figure 6.10, two different types of containment hold: feature containment and constituent containment. I start with feature containment. Each feature of the light head (i.e. features contained in ϕP and F1) is also a feature within the

Figure 6.9: EXT$_{\text{NOM}}$ vs. INT$_{\text{ACC}}$ in the matching type

Figure 6.10: EXT$_{\text{NOM}}$ vs. INT$_{\text{ACC}}$ in the internal-only type (repeated)

relative pronoun. Therefore, the relative pronoun contains the light head. Constituent containment works as follows. The NOMP forms a constituent within the RELP. Therefore, the relative pronoun contains contains the light head.

Consider Figure 6.9 again. Here feature containment holds, but constituent containment does not. The light head and the relative pronoun contain exactly the same features as in 6.10, so also here each feature of the light head (i.e. features contained in ϕP and F1) is also a feature within the relative pronoun However, the features are structured differently, in such a way that the light head does no longer form a single constituent within the relative pronoun.

In sum, constituent containment is a stronger requirement than feature containment. Only this stronger requirement is able to distinguish the internal-only from the matching type. Therefore, this account crucially relies on constituent containment being the containment requirement that needs to be fulfilled.

Constituent containment is not only the requirement for deletion in headless relatives. It is also what seems to be crucial in NP ellipsis in general. Cinque (2020) argues that nominal modifiers can only be absent if they form a constituent with the NP. If they do not, they can also not be interpreted and ellipsis is ungrammatical.

In (7), I give an example of a conjunction with two noun phrases from Dutch. The first conjunct consists of a demonstrative, an adjective and a noun, and the second one only of a demonstrative.

(7)   deze witte huizen en   die
        these white houses and those
        'these white houses and those white houses'   (Dutch)

In Figure 6.11, I schematically show the first and second conjunct of (7).

The YP in the second conjunct is the constituent that is deleted. I drew a dashed circle around it, and I marked the content gray. This YP contains the adjective and the noun. The interpretation of the YP in the second conjunct can be recovered, because the YP in the first conjunct served as the antecedent. What is crucial here is that the deleted material forms a single constituent, and that is why it can be recovered.

The situation is different in Kipsigis, a Nilotic Kalenjin language spoken in

Figure 6.11: Nominal ellipsis in Dutch

Kenya. In (8), I give an example of a conjunction of two noun phrases in Kipsigis. The first conjunct consists of a noun, a demonstrative and an adjective, and the second one only of a demonstrative (Cinque, 2020).

(8) kaarii-chuun leel-ach ak chu
     houses-those white-PL and these
     'those white houses and these houses'
     not: 'those white houses and these white houses' (Kipsigis, Cinque 2020: 24)

The order between the noun, the demonstrative and the adjective indicates that the NP must have moved (probably cyclically via YP) to the specifier of WP. I show this in (9).

(9)
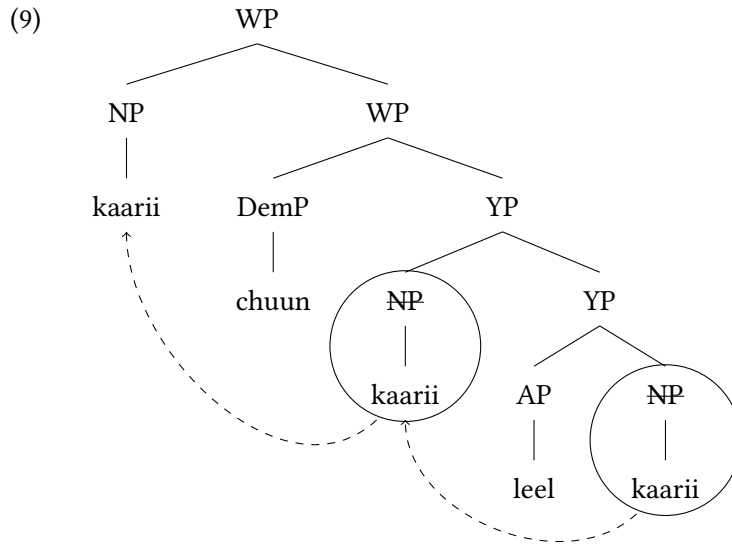
In Figure 6.12, I schematically show the first and second conjunct of (8).
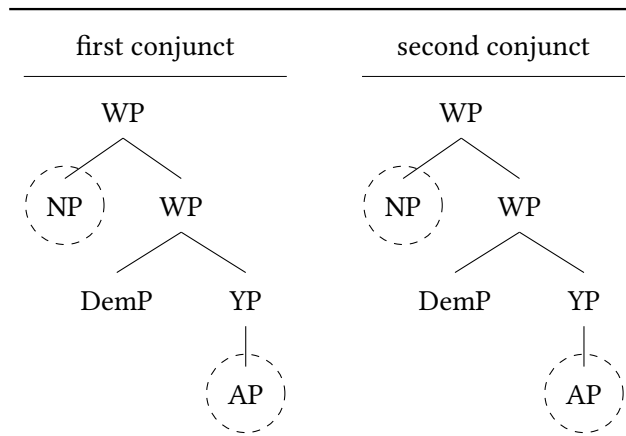
Figure 6.12: Nominal ellipsis in Kipsigis

Different from in the Dutch example, the adjective and the noun that are deleted in the second conjunct of (8) do not form a constituent. I draw a dashed circle about the deleted elements and their antecedents in Figure 6.12. Since the adjective and the noun do not form a single constituent together, they cannot be interpreted in the second conjunct of (8). Instead, only the noun can be recovered.

This observation regarding NP ellipsis provides independent evidence for my assumption that constituent containment is the crucial requirement for deletion of the light head or the relative pronoun in headless relatives.

I do not give an example in which the light head bears a more complex case than the relative pronoun. The reasoning here is the same as for the internal-only type: both the light head and the relative pronoun contain a feature that the other element does not contain. Since the weaker requirement of feature containment is not met, the stronger requirement of constituent containment cannot be met either.

The comparisons between the constituents within the light heads and the relative pronouns correctly derive the patterns observed in the matching type of language. An overview of the patterns is shown in Table 6.2.

Table 6.2: Grammaticality in the matching type

	surface pronoun
$K_{INT} = K_{EXT}$	RP_{INT}
$K_{INT} > K_{EXT}$	*
$K_{INT} < K_{EXT}$	*

In matching languages, headless relatives are only grammatical when the internal and the external case match. When one of them is more complex than the other one, there is no longer a grammatical outcome possible. This follows from the fact that in matching languages ϕP and κP both both correspond to a morpheme, which means that they both form separate constituents. As a result, the light head only forms a constituent within the relative pronoun when the internal and external case match. When the internal and external case differ, neither of the two forms is contained in the other one.

6.2.3 The unrestricted type

I end with the unrestricted type of language. In this type of language, the constituency is the same as in the internal-only type of language as shown in Figure 6.13.
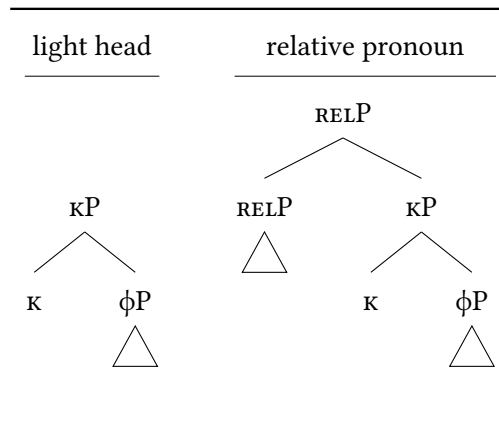
Figure 6.13: LH and RP in the unrestricted type

The κP is spelled out a whole, including the ϕP. The RELP has its own spellout and is merged as a prefix to the κP. Chapter **??** motivates this analysis.

so for the first two, see up there

The difference between the internal-only type and the unrestricted type lies in when the external case is more complex than the internal case. In the internal-only type this is ungrammatical, and in the unrestricted type, it is grammatical. This means that the light head can delete the relative pronoun when its case is more complex.

Two types of constituent containment: structural containment = you contain a constituent that contains the features formal containment = you contain a constituent that corresponds to the same form

[6]

I suggest that there is a syncretism between the phi-features and the phi-features plus the relative features. That is, there is a lexical entry for the RELP which contains

---

[6]Another option is that the relative pronoun does not actually form a constituent within the light head. Instead, the relative features form a separate constituent which is not deleted. In this chapter I only discuss the situation in which the relative pronoun as a whole forms a constituent within the light head, and the relative pronoun is deleted as a whole. I return to the deletion of separate constituents in Chapter 9.

give a tree here that illustrates it

the feature REL and feature ϕ, but not a more specific one that spells out ϕ on its own. In (10), I give the lexical entry, which spells out as /α/.

RELP $\Longleftrightarrow \alpha$

RELP   KP

K ϕP

(10)
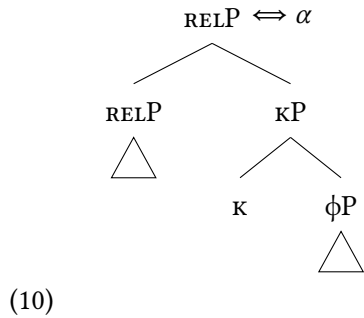
Cyclicity For the unrestricted type of language I need to make explicit an additional assumption which concerns the larger syntactic structure of headless relatives. I assume that the relative clause is built first, which includes the relative pronoun and its case. At a later stage in the derivation, the light head is built. The last features of the light head that are merged are the case features. This means that there is a stage in which the relative pronoun does not bear any case features yet, like this:

light head	relative pronoun
NOMP	RELP
F1 ϕP	RELP ϕP
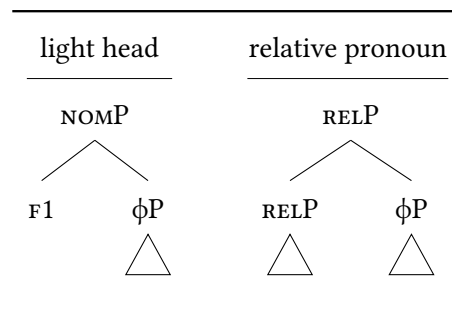
Figure 6.14: EXT$_\varnothing$ vs. INT$_{\text{NOM}}$ in the unrestricted type

then the F1 is merged

so there is a point in the derivation in which the rp and the lh are syncretic and at this point the rp is deleted

then the F2 is merged

light head   relative pronoun
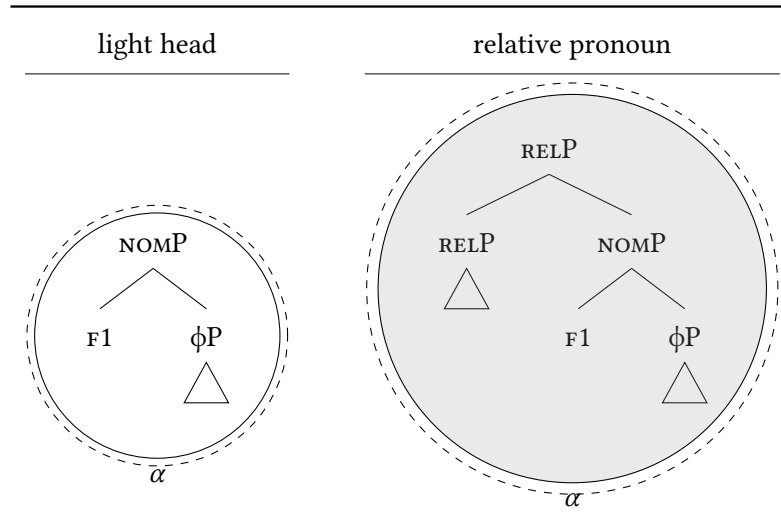
Figure 6.15: EXT_NOM vs. INT_NOM in the unrestricted type

light head   relative pronoun
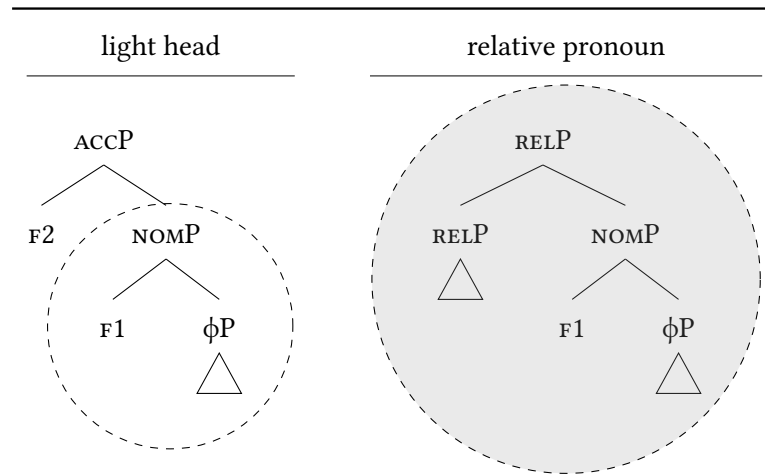
Figure 6.16: EXT_NOM vs. INT_NOM in the unrestricted type

so there is a stage in the derivation in which the light head is nominative and so is the relative pronoun

The fact that syncretism licenses deletion is not specific to the syncretism between RELP and ϕP. Syncretism between different cases has the same effect. I illustrate this with an example from Modern German.

Consider the example in (11), in which the internal nominative case competes against the external accusative case. The relative clause is marked in bold. The internal case is nominative, as the predicate *gefällen* 'to please' takes nominative subjects. The external case is accusative, as the predicate *erzählen* 'to tell' takes accusative objects. The relative pronoun *was* 'REL.INAN.NOM/ACC' is syncretic between the nominative and the accusative.

(11)   Ich   erzähle   **was**   **immer mir**
           1SG.NOM tell.PRES.1SG$_{[ACC]}$ RP.INAN.NOM/ACC ever   1SG.DAT

           gefällt.
           pleases.PRES.3SG$_{[NOM]}$
           'I tell whatever pleases me.'

                                  (Modern German, adapted from Vogel 2001: 344)

There is a syncretism between the nominative and the accusative. That is, there is a lexical entry for the ACCP which contains the feature F2 and the NOMP, but not a more specific one that spells out the NOMP on its own. In (12), I give the lexical entry, which spells out as /β/.

(12)   ACCP $\iff$ β

         F2   NOMP

                F1   ϕP
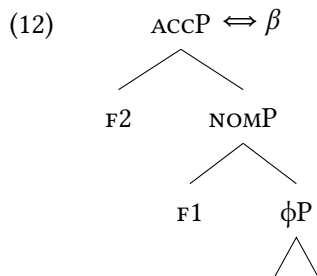
In Figure 6.17, I give an example in which the light head bears a more complex case than the relative pronoun and there is a syncretism between the nominative and the

accusative case.

Figure 6.17: EXT$_{\text{ACC}}$ vs. INT$_{\text{NOM}}$ with case syncretism

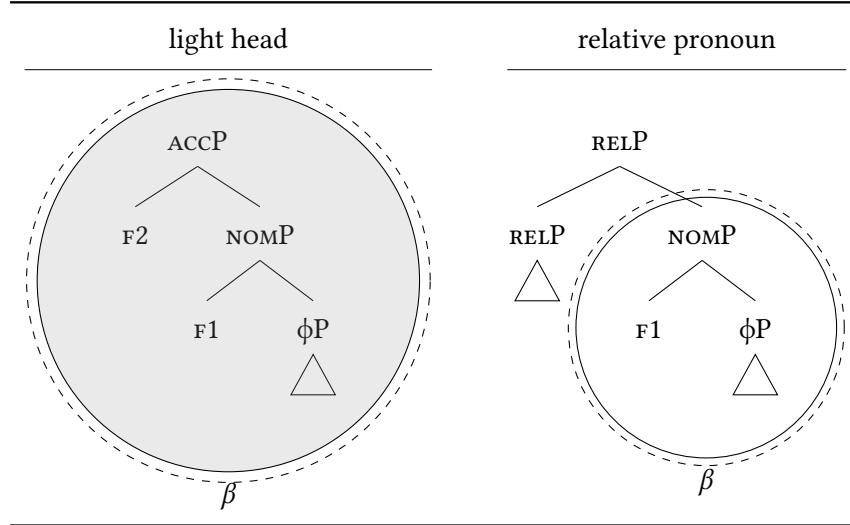The ACCP in the light head corresponds to β, illustrated by the circle around the ACCP and the β under it. The NOMP in the relative pronoun corresponds to β too, illustrated in the same way. The light head (the ACCP) forms a constituent that corresponds to β. A constituent that corresponds to α is contained in the relative pronoun (namely the NOMP). I illustrate this by drawing a dashed circle around each constituent that is a constituent in both the light head and the relative pronoun and by marking the content of the dashed circles for the light head gray. This means that a less complex case can delete a more complex case when there is a syncretic form between the two.

The comparisons between the constituents within the light heads and the relative pronouns correctly derive the patterns observed in the unrestricted type of language. An overview of the patterns is shown in Table 6.3.

In unrestricted languages, all types of headless relatives are grammatical: when the internal and the external case match, when the internal case is more complex and when the external case is more complex. This follows from the fact that in unrestricted languages ϕP and ĸP correspond to a single morpheme and from the fact that light heads and relative clauses (in the same case) are syncretic. As a result,

Table 6.3: Grammaticality in the unrestricted type

	surface pronoun
$K_{INT} = K_{EXT}$	$RP_{INT/EXT}$
$K_{INT} > K_{EXT}$	RP_{INT}
$K_{INT} < K_{EXT}$	LH_{EXT}

the light head forms a constituent within the relative pronoun when the internal and the external case match and when the internal case is more complex, and the light head is deleted. Additionally, when the external case is more complex than the internal case, the relative pronoun is syncretic with a constituent within the light head at some point in the derivation, at which the relative pronoun is deleted.

6.3 Summary

In summing up this chapter, I return to the metaphor with the committee that I introduced in Chapter 4. I wrote that first case competition takes place, in which a more complex case wins over a less complex case. This case competition can now be reformulated into a more general mechanism, namely constituent comparison. A more complex case corresponds to a constituent that contains the constituent of a less complex case.

Subsequently, I noted that there is a committee that can either approve the winning case or not approve it. In Chapter 4 I wrote that the approval happens based on where the winning case comes from: from inside of the relative clause (internal) or from outside of the relative clause (external). I argued in this chapter that headless relatives are derived from light-headed relatives. The light head bears that external case and the relative pronoun bears the internal case. The 'approval' of an internal or external case relies on the same mechanism as case competition, namely constituent comparison. If the light head forms (or is syncretic with) a constituent within the relative pronoun, the relative pronoun can delete the light head. The light head with its external case is absent, and the relative pronoun with its internal case surfaces. This is what corresponds to the the internal case 'being allowed

to surface'. If the relative pronoun is syncretic with a constituent within the light head, the light head can delete the relative pronoun. The relative pronoun with its internal case is absent, and the light head with its external case surfaces. This is what corresponds to the the external case 'being allowed to surface'.

In other words, the grammaticality of a headless relative depends on constituent comparison. The constituents that are compared are those of the light head and the relative pronoun, which both bear their own case. Case is special in that it can differ from sentence to sentence within a language. Therefore, the grammaticality of a sentence can differ within a language depending on the internal and external case. The part of the light head and relative pronoun that does not involve case features is stable within a language. Therefore, whether the internal or external case is 'allowed to surface' does not differ within a language.

This system excludes the external-only type. An external-only type would be one in which the relative pronoun can be deleted, but the light head cannot be deleted. In my proposal, an element can be deleted if forms (or is syncretic with) a constituent within the other element. Relative pronouns always contain one more feature than light heads: REL. From that it follows that the light head does not contain all features that the relative pronoun contains. Therefore, it is impossible for a relative pronoun to be syncretic with a constituent within the light head without the light head being syncretic with a constituent within the relative pronoun.

In this dissertation I describe different language types in case competition in headless relatives. In my account, the different language types are a result of a comparison of the light head and the relative pronoun in the language. The larger syntactic context in which this takes place should be kept stable. The operation that deletes the light head or the relative pronoun is the same for all language types. In this work, I do not specify on which larger syntactic structure and which deletion operation should be used. In Chapter 10 I discuss existing proposals on these topics and to what extend they are compatible with my account.

To conclude, in this chapter I introduced the assumptions that headless relatives are derived from light-headed relatives and that relative pronouns contain at least one more feature than light heads. A headless relative is grammatical when either the light head or the relative pronoun forms a constituent within the other element. This set of assumptions derives that only the most complex case can surface and

that there is no language of the external-only type.

Primary texts

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