

??  
??

??

??  
??  
??  
??

??  
??  
??  
??  
??

??

1  
??  
??  
??  
??  
??  
??

??  
??  
??  
??  
??  
??  
??

2  
??  
??  
??  
??  
??

---

The  
same  
holds  
the  
other  
way  
around:  
the  
light  
head  
is  
also  
for-  
mally  
con-  
tained  
in  
the  
rel-  
a-  
tive  
pro-  
noun,  
so  
the  
light  
head  
can  
be  
deleted  
too.  
In  
Sec-  
tion  
??

??<sup>3</sup>  
??



??  
 ??  
 ??  
 ??  
 ??  
 ??  
 ??

ex:ohg-  
 entry-  
 er  
 boom  
 nomP  
 [k1]  
 #P  
 #]  
 anP  
 an]  
 clP  
 cl]  
 ref]

(.east)  
 node[right]  
 er;  
 boom  
 accP  
 [k2]  
 nomP  
 [k1]  
 #P  
 #]  
 anP  
 an]  
 clP  
 cl]  
 ref]

(.east)  
 node[right]  
 en;

I  
 con-  
 tinue  
 with  
 the  
 mor-  
 pheme  
 d.  
 This  
 mor-  
 pheme  
 cor-  
 responds  
 to  
 what  
 I  
 called  
 the  
 rel-  
 feature  
 in  
 Chap-  
 ter  
 ??  
 and  
 in  
 the  
 in-  
 tro-  
 duc-  
 tion  
 to  
 this  
 chap-  
 ter.  
 I  
 argue  
 that  
 this  
 mor-  
 pheme  
 ac-  
 tu-  
 ally  
 spells  
 in

of  
the  
lex-  
i-  
cal  
trees  
in  
the  
lan-  
guage's  
lex-  
icon,  
and  
nei-  
ther  
of  
the  
spell-  
out  
driven  
move-  
ments  
leads  
to  
a suc-  
cess-  
ful  
spell-  
out.  
Back-  
track-  
ing  
leads  
to  
split-  
ting  
up  
the  
relP  
from  
the  
#P.  
The  
fea-  
ture  
kl  
is  
merged  
in  
both  
workspaces,  
so  
with  
the  
relP  
and  
and  
with  
the  
#P.  
The  
spell-  
out  
of  
kl  
is suc-  
cess-  
ful  
when  
it  
is com-  
bined  
with  
the  
#P.  
It  
forms  
a con-  
stituent  
in  
the  
lex-  
i-  
cal  
tree  
in  
H,  
which  
cor-  
re-  
sponds  
to  
the  
er.  
The  
nomP  
is  
spelled  
out  
as  
er,  
and  
all  
con-  
stituents  
are  
merged  
back  
into  
the  
lex-

head  
is  
iden-  
ti-  
cal  
to  
the  
in-  
ter-  
nal  
syn-  
tax  
of  
the  
Mod-  
ern  
Ger-  
man  
ex-  
tra  
light  
head.  
They  
both  
form  
a  
sin-  
gle  
phi  
and  
case  
fea-  
ture  
port-  
man-  
teau.

In  
the  
re-  
main-  
der  
of  
this  
sec-  
tion,  
I  
dis-  
cuss  
the  
two  
ex-  
tra  
light  
heads  
that  
I  
com-  
pare  
the  
in-  
ter-  
nal  
syn-  
tax  
of  
in  
Sec-  
tion  
??.

As  
I  
noted  
be-  
fore,  
these  
forms  
do  
not  
sur-  
face  
as  
light  
heads  
in  
a  
light-  
headed  
rel-  
a-  
tive.  
They  
do  
also  
not  
sur-  
face  
any-  
where  
else  
in  
the  
lan-  
guage.  
They  
are  
the  
nom-  
i-  
na-  
tive  
mas-  
cu-  
line  
sin-  
gu-  
lar  
and  
the  
ac-  
cusative

and  
demon-  
stra-  
tive  
pro-  
nouns  
are  
syn-  
cretic  
in  
Old  
High  
Ger-  
man.  
Both  
of  
them  
start  
with  
a  
d,  
fol-  
lowed  
by  
a  
phi  
and  
case  
fea-  
ture  
port-  
man-  
teau.  
I  
al-  
ready  
dis-  
cussed  
the  
phi  
and  
case  
fea-  
ture  
mor-  
pheme  
in  
Sec-  
tion  
??.  
In  
what  
fol-  
lows,  
I  
dis-  
cuss  
how  
the  
two  
ds  
are  
re-  
lated.

??<sup>9</sup>





??<sup>10</sup>





ment.<sup>11</sup>

??<sup>12</sup>  
 cl-  
 'dem.m.sg.nom'  
 cl-  
 'dem.m.sg.acc'  
 The  
 func-  
 tional  
 se-  
 quence  
 for  
 the  
 demon-  
 strative  
 is  
 shown  
 in  
 ???  
 boom  
 [kP  
 [k]  
 [demP  
 [dem]  
 [relP  
 [rel]  
 [whP  
 [wh]  
 [#P  
 [#]  
 [anP  
 [an]  
 [clP  
 [cl]  
 [ref]

The functional sequence contains the pronominal feature ref, the gender features cl and an, the number feature #, the operator features wh, rel and dem and case features k. I introduced the lexical entries that are required to spell

section,  
I  
compare  
the  
in-  
ter-  
nal  
syn-  
tax  
of  
ex-  
tra  
light  
heads  
and  
demon-  
stra-  
tives  
to  
the  
in-  
ter-  
nal  
syn-  
tax  
of  
rel-  
a-  
tive  
pro-  
nouns  
in  
Old  
High  
Ger-  
man.  
This  
is  
the  
worked  
out  
ver-  
sion  
of  
the  
com-  
par-  
isons  
in  
Sec-  
tion  
??  
What  
is  
dif-  
fer-  
ent  
here  
is  
that  
I  
show  
the  
com-  
par-  
isons  
for  
Old  
High  
Ger-  
man  
specif-  
i-  
cally,  
and  
that  
the  
con-  
tent  
of  
the  
in-  
ter-  
nal  
syn-  
tax  
that  
is  
be-  
ing  
com-  
pared  
is  
mo-  
ti-  
vated  
ear-  
lier  
in  
this  
chap-  
ter.







dher.<sup>14</sup>

In  
Fig-  
ure  
??,  
I  
give  
the  
syn-  
tac-  
tic



dher.<sup>1516</sup>

rea- For  
sons  
of  
space  
I  
do  
not  
show  
the  
com-  
par-  
isons  
of  
the  
other  
match-  
ing  
sit-  
u-  
a-  
tions.  
These  
are  
sit-  
u-  
a-  
tions  
in  
which  
both  
the  
in-  
ter-  
nal  
and  
ex-  
ter-  
nal  
case  
are  
ac-  
cusative  
of  
both  
the  
in-  
ter-  
nal  
and  
ex-  
ter-  
nal  
case  
are  
da-  
tive.  
The  
same  
logic  
as  
I  
showed  
in  
Fig-  
ure  
??  
and  
Fig-  
ure  
??  
works  
for  
these  
sit-  
u-  
a-  
tions  
too.

con- I  
tinue  
with  
the  
sit-  
u-  
a-  
tion  
in  
which  
the  
ex-  
ter-  
nal

tive.<sup>17</sup>

In  
Fig-  
ure  
??,  
I  
give  
the  
syn-  
tac-

ther.<sup>18</sup>  
The  
in-  
evitable  
re-  
sult  
seems  
to  
be  
that  
the  
light-  
headed  
rel-  
a-  
tive  
headed  
by  
the  
demon-  
stra-  
tive  
can-  
not  
be  
the  
source  
of  
the  
head-  
less  
rel-  
a-  
tive.  
This  
is  
not  
what  
the  
data  
sug-  
gests,  
how-  
ever,  
as  
more  
com-  
plex  
ex-  
ter-  
nal  
case  
is  
al-  
lowed  
to  
sur-  
face  
in  
Old  
High  
Ger-  
man.<sup>19</sup> To  
un-  
der-  
stand  
how  
gram-  
mat-  
i-  
cal  
head-  
less  
rel-  
a-  
tive  
with  
a  
more  
com-  
plex  
ex-  
ter-  
nal  
case  
gets  
to  
sur-  
face,  
the  
larger  
syn-  
tac-  
tic  
struc-  
ture  
needs  
to  
be  
con-  
sid-  
ered.  
I  
re-  
peat  
the  
light-  
headed  
rel-  
a-  
tive  
that  
is  
the  
source  
of  
the  
ex-  
am-

the  
rel-  
vant  
step  
in  
the  
deriva-  
tion.  
At  
the  
end  
of  
this  
sec-  
tion,  
I  
ex-  
plain  
why  
the  
cases  
never  
match  
when  
the  
in-  
ter-  
nal  
case  
is  
more  
com-  
plex.  
In  
the  
sit-  
u-  
ation  
in  
which  
the  
ex-  
ter-  
nal  
case  
is  
more  
com-  
plex  
Mod-  
ern  
Ger-  
man  
and  
Pol-  
ish  
are  
not  
helped,  
as  
there  
is  
no  
syn-  
cretism  
be-  
tween  
demon-  
stra-  
tives  
and  
rel-  
a-  
tive  
pro-  
nouns.  
There-  
fore,  
there  
is  
never  
any  
for-  
mal  
con-  
tain-  
ment  
that  
can  
lead  
to  
a  
dele-  
tion.



then.<sup>20</sup>

In  
Fig-  
ure  
??,  
I  
give  
the  
syn-  
tac-  
tic  
struc-  
ture  
of

tive.<sup>21</sup>  
In

this  
sit-  
u-  
tion,  
when  
the  
in-  
ter-  
nal  
case  
is  
more  
com-  
plex  
than  
the  
ex-  
ter-  
nal  
one,  
it  
does  
not  
make  
a  
dif-  
fer-  
ence  
to  
look  
at  
pre-  
vi-  
ous  
steps  
in  
the  
deriva-  
tion.  
The  
last  
case  
fea-  
ture  
was  
merged  
on  
the  
rel-  
a-  
tive  
pro-  
noun  
be-  
fore  
the  
first  
case  
fea-  
ture  
was  
merged  
on  
the  
demon-  
stra-  
tive.  
Go-  
ing  
back  
in  
the  
deriva-  
tion  
it  
moves  
case  
fea-  
tures  
from  
the  
demon-  
stra-  
tive  
(so  
ex-  
ter-  
nal  
case  
fea-  
tures)  
and  
not  
those  
from  
the  
rel-  
a-  
tive  
pro-  
noun.  
As  
long  
as  
the  
in-  
ter-  
nal  
case  
is  
more  
com-  
plex,  
there  
is  
no  
step  
in  
the  
deriva-

a  
light-  
headed  
rel-  
ative  
headed  
by  
an  
ex-  
tra  
light  
head.

The  
light-  
headed  
rel-  
ative  
headed  
by  
a  
demon-  
stra-  
tive  
does  
not  
gen-  
er-  
ate  
gram-  
mat-  
i-  
cal  
ex-  
am-  
ple.

On  
the  
other  
hand,  
the  
ta-  
bles  
show  
that

a  
head-  
less  
rel-  
ative  
with  
a  
more  
com-  
plex  
ex-  
ter-  
nal  
case  
needs

to  
be  
de-  
rived  
from

a  
light-  
headed  
rel-  
ative  
headed  
by

a  
demon-  
stra-  
tive.

The  
light-  
headed  
rel-  
ative  
headed  
by

an  
ex-  
tra  
light  
head  
does  
not  
gen-  
er-  
ate  
gram-  
mat-  
i-  
cal  
ex-  
am-  
ple.

This

sit-  
u-  
ation  
al-  
lows  
me  
to  
in-  
ves-  
ti-  
gate  
whether  
head-

the  
 ex-  
 ter-  
 nal-  
 case:  
 dher. Now  
 imag-  
 ine  
 a  
 sit-  
 u-  
 at-  
 tion  
 in  
 which  
 the  
 light-  
 headed  
 rel-  
 a-  
 tive  
 is  
 headed  
 by  
 an  
 ex-  
 tra  
 light  
 head.  
 Here  
 it  
 is  
 not  
 the  
 rel-  
 a-  
 tive  
 pro-  
 noun  
 that  
 is  
 deleted,  
 but  
 the  
 ex-  
 tra  
 light  
 head.  
 Con-  
 sider  
 such  
 an  
 ex-  
 am-  
 ple  
 in  
 ??  
 quham  
 [er]  
 dher  
 chisendit  
 scolda  
 uuerd-  
 han  
 come.pst.3sg[nom]  
 elh.sg.m.nom  
 rp.sg.m.nom  
 send.pst.ptcp[nom]  
 should.pst.3sg  
 be-  
 come.inf  
 the  
 one,  
 who  
 should  
 have  
 been  
 sent,  
 came'  
 Old  
 High  
 Ger-  
 man,  
 isid  
 35:5  
 When  
 c-  
 command  
 is  
 a  
 re-  
 quire-  
 ment  
 for  
 dele-  
 tion,  
 then  
 the  
 rel-  
 a-  
 tive  
 pro-  
 noun  
 should  
 c-  
 command  
 the  
 ex-  
 tra  
 light  
 head.  
 I  
 sug-  
 gest  
 that

[CP  
[  
roof]  
]  
[  
text]  
]