

In Search of Case Attraction

1 The Basic Phenomenon

Case Attraction broadly refers to a situation where a nominal element displays the case associated with some other related nominal element instead of the case that it would display if the relevant nominal expression was not around.

The following discussion will focus on free relatives and correlatives, which are the syntactic environments where case attraction seems to be at play. It is not clear to me whether case attraction is ever manifested outside of these environments (but see Fanselow et al. (1999)).

1.1 (Regular) Case Attraction

Relative Pronoun appears with the external case:

- (1) (from Bianchi (1999):94-95)
 - a. (Latin, Hor., Sat 1,6,15)

notante iudice quo nosti
 judging_{ABL} judge_{ABL} who_{ABL} know
 'judging the judge you know.' (ACC → ABL)
 - b. (Old English)

syDDan hie gefricgeaD frean userne ealdorleasne, Done De
 when they learn lord_{ACC} our to-be-dead who_{ACC} that
 aer geheold wiD hettendum hor ond rice...
 before guarded against enemies treasure and kingdom
 'when they learn that our lord, who in the past defended the treasure
 and kingdom against the enemies, is dead...' (NOM → ACC)
 - c. (Old High German)

sie gedāht' ouch maniger leide, der ir dā héimé
 she thought also some sufferings_{GEN} which_{GEN} her at home
 geschach.
 happened
 'She thought of some pain that she suffered at home.' (NOM → GEN)

The attracted case is always less marked than the attracting case (see McCreight (1988)).

- (2) A Case-Markedness Hierarchy:
 NOM < ACC < DAT < GEN ...

1.2 Inverse Case Attraction

'Head' NP/External determiner appears with the internal case:

- (3) (from Bianchi (1999):93)
 - a. (Latin, Verg., Aen. I,573)

Urbem quam statuo vestra est
 city_{ACC} which_{ACC} found yours is
 'The city that I found is yours.' (NOM → ACC)
 - b. (Latin, Cato, Agr. 51)

Pulli qui nascentur, eos in terra deprimito
 sprouts_{NOM} which_{NOM} germinate, them_{ACC} in earth layer
 'You must layer in tthe earth the sprouts that germinate.' (ACC → NOM)
 - c. (Latin, Plautus, Poen. 644)

Hunc chlamydatum quem vides, ei Mars iratust
 this_{ACC} soldier_{ACC} whom_{ACC} see him_{DAT} Mars angry-is
 'The soldier whom you see, Mars is angry at him.' (DAT → ACC)
 - d. (Old High German)

Den schilt den er vür bôt der wart schiere zeslagen
 the_{ACC} shield_{ACC} which_{ACC} he held that was quickly shattered
 'The shield that he held was quickly shattered.' (NOM → ACC)

Note that Inverse Case-Attraction allows for a more marked case to be attracted.

Inverse Case-Attraction is quite likely something quite distinct from Case-Attraction. The above cases can be reanalyzed as correlatives where the head precedes its relative determiner.

1.3 Matching in Free Relatives

The term *matching effect* was first introduced in Grimshaw (1977) and developed in further work by Bresnan and Grimshaw (1978) and Groos and van Riemsdijk (1981). It refers to the phenomenon that in certain languages, free relatives are acceptable only in configurations which are either case matching or categorial matching.

1.3.1 Case Matching

Case matching obtains if the case assigned to the relativized element in the free relative from inside the free Relative Clause is the same as the case assigned to the free Relative Clause from the outside. German displays case matching effects in free relatives (cf. (4)).

- (4) a. Wer(nom) nicht stark ist, muss klug sein.
Who not strong is must clever be
'Who isn't strong must be clever.'
- b. *Wen(acc)/*Wer(nom) Gott schwach geschaffen hat, muss klug sein.
Whom/who God weak created has must clever be
'Who God has created weak must be clever.'
- c. *Wem(dat)/*Wer(nom) Gott keine Kraft geschenkt hat, muss klug sein.
Whom/who God no strength given has must clever be
'Who God has given no strength to must be clever.'

1.3.2 Categorial Matching

Categorial matching obtains if the category of the relativized element in the free relative is the same as the category of the node occupied by the entire free relative. Categorial matching can be seen in Dutch & English (cf. Groos & Riemsdijk 1979 and Bresnan & Grimshaw 1978 respectively).

- (5) a. Ken jij de jongen met wie zij flirt?
Know you the boy with who she flirts
'Do you know the boy with who she is flirting?.' (*know* subcategorises for NP)
- b. *Ken jij met wie zij flirt?
Know you with who she flirts
'Do you know with who she is flirting?.' (FR is a PP, clash takes place)

- c. Ken jij wie zij net kuste?
Know you who she just kissed
'Do you know who she just kissed?.' (FR is an NP, no clash)

- (6) a. I'll buy [_{NP} [_{NP} whatever] you want to sell].
b. John will be [_{AP} [_{AP} however tall] his father was].
c. I'll word my letter [_{AdvP} [_{AdvP} however] you word yours].
d. I'll put my book [_{AdvP} [_{AdvP} wherever] you put yours]].

1.3.3 Headed Relatives

Headed relatives do not generally display matching effects - the case marking on the head of the main NP and the Relative Clause can have different case markings/categories. cf. (7a,b for German and English respectively)

- (7) a. Der Mensch(nom), den(acc) Gott schwach geschaffen hat, muss klug sein.
The person whom God weak created has must clever be
'The person whom God has created weak must be clever.'
- b. I saw [_{NP} [_{NP} the girl] [_{CP} [_{PP} to whom]_i [_{IP} John gave a book t_i]]]

1.3.4 The Role of Syncretism

In German, the relative pronoun *was* represents both the nominative and the accusative neuter.

- (8) Groos & Riemsdijk (1979)
- a. [Was du mir gegeben hast], ist prächtig.
what you me given have is wonderful
'What you have given me is wonderful.' (inside=acc, outside=nom)
- b. Ich habe gegessen [was noch übrig war].
I have eaten what still left was
'I ate what was left.' (inside=nom, outside=acc) (exs. from Groos & van Riemsdijk (1979))

2 Bavarian

(from Bayer (1984), see also discussion in Bianchi (1999):172-174)

Relative clauses in Bavarian involve an invariant complementizer *wo* and a relative pronoun, which can be optional in certain environments.

2.1 The Form of Relative Pronouns

	NOM	ACC	DAT
Masc	der -	den +	dem +
Fem	die -	die -	der(a) +
Neut	des -	des -	dem +
Plur	die -	die -	dene(n) +

- [+/-] oblique

2.2 Optionality of Relative Pronouns

Non-oblique relative pronouns are optional across the board:

- (9) a. I sog's dem Mō (der) wo im Gartn arwat.
I say-it the_{DAT} man who_{NOM} C in-the Garden works
'I said it to the man who works in the garden.'
- b. Mir song-s dera Frau (die) wo da Hund bissn hod.
we tell-it the_{DAT} woman who_{ACC} C the dog bit
'I told it to the woman who the dog bit.'
- c. Mir song-s dene Menner (die) wo da Hund bissn hod.
we tel-it the_{DAT} men who_{ACC} C the dog bitten has
'I said it to the men who the dog bit.'

→ Identity between external determiner and relative pronoun not required.

Oblique relative pronouns can only be omitted under identity with an oblique external determiner:

- (10) a. (DAT,DAT) → (DAT,ϕ)
Sie gem's dem Mō (dem) wo mir g'hoifa hom.
they give-it the_{DAT} man who_{DAT} C we helped have
'They gave it to the man whom we helped.'
- b. (NOM,DAT) ↗ (NOM,ϕ)
Der Mō *(dem) wo mir g'hoifa hom
the_{NOM} man who_{DAT} C we helped have
'The man whom we helped...'

The following cases bring out the relevance of obliqueness (as opposed to a distinction like structural vs. non-structural)

- (11) (Non-Oblique, Non-Oblique)
a. (NOM,ACC) → (NOM,ϕ)
Die Lampn (die) wo i g'seng hob wor greißlich.
the_{NOM} lamp which_{ACC} C I seen have was ugly
'The lamp that I saw was unsightly.'
- b. (NOM,ACC) → (NOM,ϕ)
Des Audo (des) wo i mecht is z'teia.
the_{NOM} car which_{ACC} I like is expensive
'The car I like is expensive.'

- (12) (NOM/Non-Oblique,ACC/Oblique) ↗ (NOM/Non-Oblique, ϕ)

Der Mantl *(den) wo i kaffd hob wor z'rissn.
the_{NOM} coat which_{ACC} C I bought have was torn
'The coat that I bought was torn.'

2.3 Generalization and Some Analysis

(13) The Pattern:

- a. Non-Oblique relative pronouns are always optional.
- b. Oblique relative pronouns are optional only under identity with an *identical* external determiner.

• This is not Case Attraction - the relative pronoun does not come to have external case.

• Similar in spirit to Case Matching - deletion under identity (except for the non-obliques).

• Bianchi (1999)'s explanation is in terms of abstract incorporation of the relative determiner and the external determiner and morphological underspecification.

- (14)
- a. Non-Obliques lose their morphological case-feature by the time they are in [Spec,CP] (or maybe they never had it any way). Oblique relative pronouns have such a case-feature.
 - b. Assume Late Insertion
 - c. Optional movement of Relative Determiner to External Determiner.
 - d. Features must be realized (at least once, maybe exactly once?).

(15) Realizations of $D_{external}+D_{relative}$:

- a. (oblique[x] + non-oblique[y]) → oblique[x]
- b. (non-oblique[x] + non-oblique[y]) → non-oblique[x]
- c. (non-oblique[x] + oblique[y]) → **no realization**
- d. (oblique[x] + oblique[y]) → **no realization**
- e. (oblique[x] + oblique[x]) → oblique[x]

3 Zurich German

(from Salzmann (2005))

3.1 The Basic Data

• No relative pronouns for individuals¹

• Invariant Complementizer *wo*

• Resumptive Pronouns are available from dative objects downward on Keenan and Comrie (1977)'s Accessibility Hierarchy, including possessors. They are **not** available for subjects and objects.

(16) a. subject:

d=Frau, wo (*si) imme z=spaat chunt
the=woman C she always too=late comes
'The woman who is always late...'

b. object:

es Bild, wo niemert (*s) cha zale
a picture C nobody it can pay
'a picture that nobody can afford'

c. indirect object: (from van Riemsdijk (1989))

de Bueb, wo mer *(em) es Velo versproche händ
the boy C we he:DAT a bike promised have:1PI
'the boy we promised a bike'

d. prepositional object:

D=Frau, won=i von=*(ere) es Buech übercho ha,
the=woman C=I from=(she:DAT) a book got have:1SG
find i müesam.
find:1Sg I annoying
'I find the woman from whom I got a book annoying.'

e. possessor:

Das deet isch de Typ, won=i geschter *(sini) Fründin ha
that there is the guy C=I yesterday his girlfriend have:1SG
wele verfüere.
wanted seduce

'That's the guy whose girlfriends I wanted to seduce yesterday.'

¹There are relative pronouns for adverbial relations - *why, how, where* etc.

3.2 A Movement Based Analysis

Salzmann (2005) offers several arguments that the presence of resumptive pronouns in the above cases should not be taken to show that these cases do not involve movement. He notes that ZG relatives with resumptive pronouns still show reconstruction and crossover effects.

- (17) True pronouns do not cause SCO:
- *The boy who_i he_i thinks that Mary likes t_i
 - The boy such that_i he_i thinks that Mary likes him_i.

Resumptives in ZG cause SCO:

- (18) (note: no subject resumptives, hence subject must be a real pronoun)

*De Bueb won er_i tänkt, dass d=Marie in_i gärn hät
the boy C he thinks that the=Mary him likes has

'*the boy who_i he_i thinks that Mary likes t_i.'

He distinguishes between 'true' resumption (resumption within islands) and 'apparent' resumption (resumption outside of islands). This is in line with much recent work on resumption (see in particular Aoun et al. (2001)).

3.3 Case-Matching in ZG

When certain identity conditions obtain between the external syntactic environment of the NP head and the internal syntactic environment of the relative pronoun, resumption is not permitted.

- (19) Resumptives and Prepositions within the relative clause are deleted if the head noun (i) bears the same case, and (ii) is selected by the same preposition.
- (20) a. dative-dative:
Ich han em Bueb, [wo=t (*em) es Buech versproche
I have:1Sg the:Dat boy C=you he:Dat a book promised
häsch], es schöns Exemplar ggee.
have:2Sg a beautiful copy given
'I gave the boy who you promised a book a beautiful copy.'
- b. from-from:

Ich ha vo de Frau, [won=i scho geschter
I have:1Sg from the:Dat woman C=I already yesterday
(*von=ere) es Buech übercho han], wider äis übercho.
from=she:Dat a book received have:1Sg again one received
'I received another book from the woman from whom I had already
received a book yesterday.'

3.3.1 Subjects and Objects

No matching here - resumption is not an option for subjects and objects even if the external environment does not match.

- (21) a. dative-nominative:

De Frau, [wo (*si) geschter cho isch], schuld i no
the:Dat woman C she:Nom yesterday come is owe:1Sg I still
viel Gält.
much money

'I still owe the woman who came yesterday a lot of money.'

- b. P-dative-nominative:

Vo de Frau, [won=i (*si) letschts Jahr in Kreta troffe
from the:Dat woman C=I she:Acc last year on Crete met
han], han i nie me öppis ghöört.
have:1Sg have:1Sg I never more something heard

'I've never heard again from the woman I met last year on Crete.'

3.3.2 Matching with PPs

We can set aside cases where the internal and external case are different: we will always get resumption in those cases.

- P-DP[Case1], Resumptive[Case1] → resumptive cannot appear

- (22) Ich ha vom Maa, [won=i (*em) es Buech ggee
I have from.the:Dat man C=I he:Data book given have:1Sg
han], geschter mis Gält übercho.
yesterday my money got
'Yesterday I got the money from the man to whom I had given a book.'

- DP[Case1], P-Resumptive[Case1] → resumptive must appear

- (23) Ich han em Maa, [won=i *(von=em) es Buech übercho
 I hvae:1Sg the:Dat man C=I from=he:Dat a book received
 han], zwänzg Stutz ggee.
 have:1Sg twenty bucks given
 'I gave the man from which I received a book twenty bucks.'

- P₁-DP[Case1], P₂-Resumptive[Case1] → resumptive must appear

- (24) Ich ha vo de Lüüt, [won=i *(mit=ene) i d=Schuel
 I have:1Sg from the:Dat people C=I with=they:Dat in the=school
 bin], scho lang nüüt me ghöört.
 am already long nothing anymore heard
 'I have not heard anything for a long time from the people with whom I
 went to school.'

- P-DP[Case1], P-Resumptive[Case1] → resumptive cannot appear

- (25) from-from:

Ich ha vo de Frau, [won=i scho geschter
 I have:1Sg from the:Dat woman C=I already yesterday
 (*von=ere) es Buech übercho han], wider äis übercho.
 from=she:Dat a book received have:1Sg again one received

'I received another book from the woman from whom I had already received a book yesterday.'

3.3.3 Matching with Datives

It has been argued that Datives in German are not uniform: some authors distinguish between structural (unaccusative subjects) and inherent (transitive objects, ditransitive goals).

With respect to matching, they all pattern together:

- in the (NOM, DAT) environment, there must be resumption (irrespective of whether the dative is structural/inherent).
- in the (DAT, DAT) environment, there cannot be resumption (irrespective of whether the dative is structural/inherent).

3.3.4 The Role of Surface Form

What seems to matter for matching is surface form:

Bare indefinite plurals without adjectives are ambiguous w.r.t. Case. In such cases, resumption is blocked suggesting that matching is stated on surface form and not abstract case features.

- (26) Mane, won i (*ene) es Buech gib, müend intellektuell sii.
 men C I they:Dat a book give:1Sg must:Pl intellectual be
 'Men to whom I give a book must be intellectual.'

3.4 Towards an Explanation

3.4.1 Datives must be realized

Datives seem to differ from Nominatives/Accusatives in that they (generally) require morphological realization.

- Certain indefinite quantifiers do not inflect for case. These quantifiers cannot appear in dative-marked positions.

- (27) (from Bayer et al. (2001))

a. Accusative:

Wir haben genug/nichts/allerlei/etwas/wenig erlebt.
 we have enough/nothing/a-lot/something/little experienced
 'We have experienced enough/nothing/a lot/something/little.'

b. Dative:

*Feuchtigkeit schadet genug/nichts/allerlei/etwas/wenig.
 humidity harms enough/nothing/a-lot/something/little
 'Humidity harms enough/nothing/a lot/something/little.'

Some of these have inflected forms, which are optional for the accusative but obligatory for the dative:

- (28) a. Wir haben schon viel-(es)/nur wenig-(es) erlebt.
 we have already much-Acc only little-Acc experienced
 'We have experienced much already/only little.'
- b. Das schadet/gelicht/ähneln viel-*(em)/wenig-*(em).
 that harms>equals/resembles much-Dat/little-Dat
 'That harms>equals/resembles much/little.'

- Topic Drop

- (29) a. accusative topic, can be dropped:
 Hab' ich schon gesehen
 have I already seen
 'I have already seen (it).'
- b. dative topic, cannot be dropped:
 *Würde ich nicht vertrauen
 would I not trust
 *'I wouldn't trust (him).'

- Comparatives

- (30) a. Mehr Patienten sind gekommen als [NOM...] behandelt werden
 more patients are come than treated become
 konnten.
 could
 'More patients showed up than could be treated.'
- b. Mehr Patienten sind gekommen als der Arzt [DAT*(ihnen)]
 more patients are come than the doctor they:Dat
 Medikamente geben konnte.
 medicine give could
 'More patients showed up than the doctor could give medicine to.'

Salzmann notes that (30b) has the feeling of an intrusive pronoun in Standard German, but is unmarked in ZG.

- A ban against P-stranding is also relevant (see Fleischer (2002), also diss.)

3.5 An Analysis

- Matching as incorporation:

- (31) a. D-incorporation:
 [_{DP} D_i+D_{ext} [_{CP} [_{DP} t_i NP] C [...]]]
- b. D and P incorporation:
 [_{PP} P_i+P_{ext} [_{DP} D_j+D_{ext} [_{CP} [_{PP} t_j NP]] C [...]]]

- Distributed Deletion (see Fanselow and Cavar (2002)): a mechanism to allow different parts of a chain to be realized in different positions:

(32) A-bar splits in ZG:

- a. Wer häsch gsäit, dass ich *(em) das Buech cha verhauffe?
 who.Obl have.2Sg said that I he.Dat the book can sell
 'To whom did you say that I can sell the book?'
- b. Wer häsch gsäit, dass=t *(mite=en) wetsch go tanze?
 who.Obl have.2Sg said that=you with=he.Dat would-like go dance
 'With whom did you say that you would like to go dancing?'

Some redundancy in realization of different copies, Regeneration

- Do not multiply realize case features.

4 Case Attraction in Processing

Next week

More German dialects

And after that Correlatives

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