

# Antipronominal Contexts and the Structure of Relative Clauses

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## **0. Introduction**

- Aim of the talk
  - Provide a novel argument for the Matching Analysis of relative clauses (RC)
- Main claims
  - Antipronominal Contexts provide a diagnostics for the structure of RCs
  - a relative pronoun is a lexical NP whose lexical head is deleted
- Structure of the talk
  - overview of the analyses to relative clauses
  - antipronominal contexts in German
  - comparison of the analyses
  - FRs & some apparently problematic aspects of the Matching Analysis

## **1. Three Approaches to the Structure of RCs**

- *Head External Analysis*, HEA (Chomsky 1977 et seq.)
  - (1) The man<sub>1</sub> [<sub>RC</sub> who<sub>0,1</sub> I like t<sub>i</sub>] is an idiot.
- *Matching Analysis*, MA (Chomsky 1965, Katz & Postal 1964, Citko 2001, Salzmann 2006)
  - (2) The man<sub>1</sub> [<sub>RC</sub> [who ~~man~~<sub>1</sub>]<sub>i</sub> I like t<sub>i</sub>] is an idiot.
- *Raising Analysis*, RA (Kayne 1994, Bianchi 2000, de Vries 2002)
  - (3) The [<sub>RC</sub> ... man<sub>k</sub> ... [who t<sub>k</sub>]<sub>i</sub> I like t<sub>i</sub>] is an idiot.
- Two syntactic differences between the three approaches
  - (i) the MA and the RA take the relative pronoun to be *a lexical NP* in disguise  
the HEA takes the relative pronoun to be *a pronoun*
  - (ii) the RA has the head noun *only inside* the RC  
the MA has the head noun *both in and outside* the RC
- So far, only the semantic consequence of the first difference have been taken into account
- However, there are also purely syntactic consequence of these differences, cf. (4)
  - (4) i. If the HEA is correct, then the relative pronoun has the distribution of a pronoun; if the MA or the RA are correct, then the relative pronoun has the distribution of a lexical NP
  - ii. If the RA is correct, then the head noun can satisfy selectional restrictions only inside the RC; if the MA is correct, then the head noun can satisfy selectional restrictions both in and outside the RC

## 2. Antipronominal Contexts

- In order to decide between the different predictions made by (4i) and (4ii), one needs a tool that distinguishes lexical NP from pronouns
- Antipronominal Contexts (Perlmutter 1972, Postal 1994) provide such a tool

### (5) *Antipronominal Context*

*An Antipronominal Context is any context X in which a lexical NP is licit, but a pronoun is not*

- Some antipronominal contexts from English

- (6)
- a. I painted my house √**that color**/\*it
  - b. Frank is √**a bodyguard**/\*it
  - c. I fixed the car √**that way**/\*it

- German too features a number of antipronominal contexts, documented in (7)-(13)

### (7) manner adverbials

- a. Er schrieb seine Diss √**mit großer Freude**/\*mit ihr.  
*He wrote his thesis with great pleasure (\*with it).*
- b. Er läuft √**auf einem Bein**/\*auf ihm.  
*He walks on one leg (\*on it).*

### (8) durational adverbials

- a. Er bleibt √**18 Jahre**/\*sie weggesperrt.  
he remains 18 years them locked.up.  
*He will be put in prison for 18 years (\*them).*
- b. Er leitet den Verlag schon √**18 Jahre**/\*sie.  
he leads the publishing.house already 18 years them  
*He has been running the publishing house for 18 years.*

### (9) locational adverbials

- a. Er kommt √**aus diesem Land**/\*aus ihm.  
*He comes from that country/\*from it.*
- b. Ich wohne √**in dieser Stadt**/\*in ihr.  
*I live in this city (\*in it).*

### (10) temporal adverbials

- Der FC Bayern ist auch √**in diesem Jahr**/\*in ihm Meister geworden.  
the FC Bayern is also in this year in it champion become  
*FC Bayern won the championship also this year (\*it).*

### (11) reason adverbials

- Wir haben uns √**aus diesem Grund**/\*aus ihm getrennt.  
we have us out that reason out it broken.up  
*We broke up for this reason (\*for it).*

### (12) amount adverbials

- Der Tisch ist √**3m**/\*sie lang.  
*The table is 3m (\*them) long.*

- (13) idiosyncrasies
- a. √ Wir müssen **in diesem Fall**/\***in ihm** einige Regeln beachten.  
we must in this case in it some rules observe  
*We need to observe certain rules in this case (in it).*
  - b. √ Er ist **in das Seminar**/\***in es** eingetreten.  
he is in the seminary in it entered  
*He joined the seminary.*

### 3. Head External Analysis vs. Raising and Matching Analysis

- The three approaches make different predictions with respect to antipronominal contexts in relative clauses
  - The HEA takes the relative pronoun to be a pronoun, it therefore makes the following prediction

(14) *Relative pronouns are barred from antipronominal contexts*

- The MA and the RA take the relative pronoun to be a lexical NP in disguise, they therefore make the following prediction

(15) *Relative pronouns are licit in antipronominal contexts*

- Consider the behavior of relative pronouns in antipronominal contexts

(16) manner adverbials

- c. √ Die Freude, **mit der** ich anfangs meine Diss t schrieb, ist weg.  
the pleasure with which I in.the.beginning my thesis wrote is away  
*The pleasure I had in the beginning of my PhD phase is gone.*
- d. √ Die eine Hand, **auf der** er t lief, war sogar gebrochen.  
*The one hand on which he walked was even broken.*

(17) durational adverbials

- b. √ Ich bin für jeden Tag froh, **den** er t weggesperrt bleibt.<sup>1</sup>  
I am for every day glad that he locked.up remains  
*I am thankful for every day he stays in prison.*
- c. √ In den 18 Jahren, **die** ich jetzt die FVA t leite, habe ich 2 Fehler gemacht.<sup>2</sup>  
in the 18 years that I now the FVA lead have I 2 mistakes made  
*I have made two mistakes during the 18 years that I run the FVA.*

(18) locational adverbials

- a. √ Das Land, **aus dem** ich t komme, ist Deutschland.  
the country out which I come is Germany  
*The country I come from is Germany.*
- b. √ Die Stadt, **in der** ich t wohne, heißt Frankfurt/Main.  
the city on in which I live is.called Frankfurt/Main  
*The city where I live is called Frankfurt/Main.*

<sup>1</sup> [www.tagesspiegel.de/politik/rechtsextremismus-woher-kam-sein-hass-das-frage-ich-mich-manchmal-auch-/7621866-3.html](http://www.tagesspiegel.de/politik/rechtsextremismus-woher-kam-sein-hass-das-frage-ich-mich-manchmal-auch-/7621866-3.html)

<sup>2</sup> [www.fr-online.de/frankfurter-buchmesse/joachim-unseld-buecher-sind-zu-billig,4687284,20493016.html](http://www.fr-online.de/frankfurter-buchmesse/joachim-unseld-buecher-sind-zu-billig,4687284,20493016.html)

- (19) temporal adverbials  
 ✓ Das Jahr, **in dem** Schalke t Meister wird, werde ich nicht erleben.  
 the year in which Schalke champion becomes will I not witness.  
*I will not witness the year Schalke wins the football championship.*
- (20) reason adverbials  
 ✓ Der Grund, **aus dem** sie sich t getrennt haben, wurde nicht genannt.  
 the reason out which they REFL broken.up have become not called  
*The reason they broke up was not stated.*
- (21) amount adverbials  
 ✓ Die 3m, **die** der Tisch t lang sein soll, misst er nie!  
 the 3m which the table long be should measure it never  
*The 3m the table is supposed to be long, it does not have in length!*
- (22) idiosyncrasies
- ✓ Die Fälle, **in denen** die Regeln t nicht beachtet wurden, gehen auf sein Konto.  
 the cases in which the rules not observed became go on his account  
*He is responsible for the cases where the rules were not observed.*
  - ✓ Das Seminar, **in das** er t eintrat, war das Predigerseminar in Bautzen.  
 the seminary in which he entered was the theological seminary in Bautzen.  
*The seminary he joined was the theological seminary in Bautzen.*
- This behavior shows that the prediction of the HEA is not confirmed, whereas the one of the MA and the RA is confirmed
- (23) Structure according to the MA & the RA
- Superficial Structure*  
 Das Land [RC [aus dem] ich t komme] ist Deutschland.
  - Shallow Structure*  
 Das Land [RC [aus dem ~~Land~~] ich t komme] ist Deutschland.
- (24) Structure according to the HEA
- Superficial Structure*  
 Das Land [RC [aus dem] ich t komme] ist Deutschland.
  - Shallow Structure*  
 Das Land [RC [aus dem] ich t komme] ist Deutschland.
- NB: German is not exceptional in this regard, Cinque 1975 reports similar findings for Italian
- (25)
- Ho √mangiato/\*mangiate **le mele**.  
 I.have eaten eaten.AGR the apples  
*I have eaten the apples.*
  - Le** ho \*mangiato/√mangiate.  
 them I.have eaten eaten.AGR  
*I have eaten them.*
  - Le mele **che** ho √mangiato/\*mangiate  
 the apples which I.have eaten eaten.AGR  
*The apples that I have eaten.*

(Cinque 1975, ex. 4 & ex. 6)

- Past participle agreement is triggered by object clitics (cf. (25b)), not by full NP objects (cf. (25a)), and – surprisingly – not by relative pronouns (cf. 25c))
- Moreover, extracted object NPs (in wh-questions and left dislocations) don't trigger past participle agreement either, cf. (26)

- (26) a. Quali/che mele hai  $\sqrt{\text{mangiato}}/*\text{mangiate t}$ ?  
 which/what apples have.you eaten eaten.AGR  
*What/which apples have you eaten?*  
 b. \* Le mele, ho  $\sqrt{\text{mangiato}}/*\text{mangiate t}$ .  
 the apples, I.have eaten.AGR eaten  
*The apples, I have eaten.*

(Cinque 1975, exx. 7 & 8)

- c. Quanti libri hai  $\sqrt{\text{letto}}/*\text{letti t}$ ?  
 how.many books have.you read.AGR read  
*How many books have you read?*

(Belletti 2006, ex. 17c & ex. 17d)

- Given the MA, the absence of agreement in (25c) is due to the presence of a lexical NP

(27) Le mele [<sub>RC</sub> [che ~~mele~~] ho mangiato t]

#### 4. Three Alternative Analyses (and why they fail)

- Consider again the structure of relative clauses according to the HEA

(28) Das Land [<sub>RC</sub> [aus dem] ich t komme] ist Deutschland.

- 3 links in the structure that one can connect to to handle the behavior of relative pronouns
  - the moved element
  - the position the moved element comes from
  - the relation connecting the moved element and the position it comes from

##### 4.1. Alternative #1: the role of d-pronouns

- D-pronouns count as pronominal for the purpose of relative clause formation, but as non-pronominal with regard to antipronominal contexts
- This approach is not viable since d-pronouns are sensitive to antipronominal contexts too

(29) manner adverbials

- a. Er schrieb seine Diss  $\sqrt{\text{mit großer Freude}}/*\text{mit der}$ .  
*He wrote his thesis with great pleasure (\*with it).*  
 b. Er läuft  $\sqrt{\text{auf einem Bein}}/*\text{auf dem}$ .  
*He walks on one leg (\*on it).*

(30) durational adverbials

- a. Er bleibt  $\sqrt{\text{18 Jahre}}/*\text{die}$  weggesperrt.  
 he remains 18 years them locked.up.  
*He will be put in prison for 18 years (\*them).*  
 b. Er leitet den Verlag schon  $\sqrt{\text{18 Jahre}}/*\text{die}$ .  
 he leads the publishing.house already 18 years them  
*He has been running the publishing house for 18 years.*

- (31) locational adverbials
- a. Er kommt  $\sqrt{\text{aus diesem Land/*aus dem}}$ .  
*He comes from that country/\*from it.*
- b. Ich wohne  $\sqrt{\text{in dieser Stadt/*in der}}$ .  
*I live in this city (\*in it).*
- (32) temporal adverbials
- Der FC Bayern ist auch  $\sqrt{\text{in diesem Jahr/*in dem}}$  Meister geworden.  
the FC Bayern is also in this year in it champion become  
*FC Bayern won the championship also this year (\*it).*
- (33) reason adverbials
- Wir haben uns  $\sqrt{\text{aus diesem Grund/*aus dem}}$  getrennt.  
we have us out that reason out it broken.up  
*We broke up for this reason (\*for it).*
- (34) amount adverbials
- Der Tisch ist  $\sqrt{\text{3m/*die}}$  lang.  
*The table is 3m (\*them) long.*
- (35) idiosyncrasies
- a. Wir müssen  $\sqrt{\text{in diesem Fall/*in dem}}$  einige Regeln beachten.  
we must in this case in it some rules observe  
*We need to observe certain rules in this case (in it).*
- b. Er ist  $\sqrt{\text{in das Seminar/*in das}}$  eingetreten.  
he is in the seminary in it entered  
*He joined the seminary.*

#### 4.2. Alternative #2: the role of the trace

- Possible analysis
  - the relative pronoun is A'-moved
  - A'-movement leaves behind a particular type of trace, aka *variable*
  - such variables are generally analyzed as empty R-expression
  - empty R-expressions behave like lexical NPs
  - therefore, the variable left behind after extracting the relative pronoun also behaves like a lexical NP
  - therefore, no problem with antipronominal contexts because what occupies the critical position is a lexical NP (qua variable status)
- Problem 1 (minor problem): analysis is incompatible with a derivational model of syntax
  - antipronominal contexts are a subtype of selectional restrictions and these must be satisfied 'early' in a derivation, i.e. *before* movement operations
  - but then, the variable comes in too late
    - at the stage where the restriction for antipronominal contexts apply, there is a pronoun at the critical position
    - at the stage where the lexical NP is present (qua variable status), the restriction for antipronominal contexts did already apply
- Problem 2 (real problem): it makes wrong empirical predictions
  - if a variable could rescue a violation of an antipronominal context, then A'-movement of the offending pronominals should rescue the this violation
  - but the data in (36)-(42) show that this is not the case

- (36) manner adverbials
- a. \* **Mit ihm/mit der** schrieb er seine Diss t.  
with it with it wrote he his thesis  
*He wrote his thesis with it.*
  - b. \* **Auf ihm/auf dem** läuft er t.  
on it on it walks he  
*He walks on it.*
- (37) durational adverbials
- a. \* **Sie/die** bleibt er t weggesperrt.  
them them remains he locked.up.  
*He will be put in prison for them.*
  - b. \* **Sie/die** leitet er den Verlag schon t.  
them them leads he the publishing.house already  
*He has been running the publishing house for them.*
- (38) locational adverbials
- a. \* **Aus ihm/aus dem** kommt er t.  
out it out it comes he  
*He comes from it.*
  - b. \* **In ihm/in der** wohnt er t.  
in it in it lives he  
*He lives in it.*
- (39) temporal adverbials
- \* **In ihm/in dem** ist der FC Bayern t nicht Meister geworden.  
in it in it is the FC Bayern not champion become  
*FC Bayern did not win the championship in it.*
- (40) reason adverbials
- \* **Aus ihm/aus dem** haben wir uns nicht t getrennt.  
out it out it have we us not broken.up  
*We did not break up for it.*
- (41) amount adverbials
- \* **Sie/die** ist der Tisch t lang.  
them them is the table long  
*The table is them long.*
- (42) idiosyncrasies
- a. \* **In ihm/in dem** müssen einige Regeln t beachtet werden.  
in it in it must some rules observed become  
*In it, some rules need to be observed.*
  - b. \* **In es/in das** ist er t eingetreten.  
in it in it is he entered  
*He joined it.*

#### 4.3. Alternative #3: the role of the extraction type

- The sensitivity to antipronominal contexts could be tied to the type of extraction, and not to the type of the element undergoing extraction (Postal 1994's A- vs. B-extraction)
- In English, wh-question extraction is insensitive to antipronominal contexts (b-examples), whereas topicalization is (c-examples), *irrespective of the type of element that is extracted*

(43) predicate nominals

- a. \* Frank became **it**.
- b. √ **What** are you going to become t?
- b'. √ **What kind of dancer** do you want to be t?  
(Postal 1994, ex. 44a, ex. 18b & ex. 18a)

- c. \* That, you will never become t.
- c'. \* That kind of surgeon, Frank never became t.

(Postal 1994, ex. 19c)

(44) name positions

- a. \* He called his daughter **fathead**, but I didn't call mine **it**.  
(Postal 1994, ex. 39a (modified))

- b. √ **What** did they call her t?
- b'. √ **What name** did they call her t?
- c. \* **That**, you shouldn't call a person t in public.
- c'. \* **Fathead**, you shouldn't call a person t in public.

(Postal 1994, ex. 13f)

(45) existential there-constructions

- a. \* There is **it** /there are **them** in the bag.
- b. √ **What** is there t in the bag?
- b'. √ **What apples** are there t in the bag?
- c. \* **That**, he knew that there was t in the bottle.
- c'. \* **Such chemicals**, he knew that there were t in the bottle.

(Postal 1994, ex. 10b)

- However, this is not a general property, but a language specific one, because in German the type of extracted element does matter

(46) manner adverbials

- a. √ **Mit was für Freude** hat er seine Diss t geschrieben?  
with what for joy has he his thesis written  
*With what joy did he write his thesis?*
- b. \* **Mit was** hat er seine Diss t geschrieben?  
with what has he his thesis written  
*With what did he write his thesis?*

(47) locational adverbials

- a. √ **Aus welchem Land** kommst du t?  
out which country lies Berlin  
*Which country do you come from?*
- b. \* **Aus was** kommst du t?  
out what comes you  
*Where do you come from?*

## 5. Matching Analysis vs. Raising Analysis

- Compare again the structures for RCs according to the RA and the MA

- (48) a. The [<sub>RC</sub> ... man<sub>k</sub> ... [<sub>DP</sub> who man<sub>k</sub>]<sub>i</sub> I like t<sub>i</sub>] is an idiot.  
 b. The man<sub>1</sub> [<sub>RC</sub> [who man<sub>1</sub>]<sub>i</sub> I like t<sub>i</sub>] is an idiot.

- Since the head noun remains only RC-internally, the RA makes the following prediction

(49) *An antipronominal context is licit only inside RC*

- Since the MA has the head noun both in and outside the RC, it makes the following prediction

(50) *An antipronominal context is licit in or outside an RC*

- As the following data show, the prediction of the MA is confirmed: relativization can target an NP starting in an antipronominal context (cf. (51a)), an NP ending up in an antipronominal context (cf. (51b)), and an NP that both starts and ends up in an antipronominal context (cf. (51c))

- (51) a. ✓ Jeder kennt das Land, **aus dem** ich t komme. [AC inside RC]  
 everyone knows the country out which I come  
*Everyone knows the country where I come from.*  
 b. ✓ Ich komme **aus dem Land**, das jeder t kennt. [AC outside RC]  
 I come out the country which everyone knows  
*I come from the country everyone knows.*  
 c. ✓ Ich wohne **in der Stadt**, **aus der** du t kommst. [AC in & outside RC]  
 I live in the city out which you come  
*I live in the city where you come from.*

(52) Structures according to the RA

- a. Jeder kennt das [<sub>CP</sub> ... Land<sub>k</sub> ... [aus dem Land<sub>k</sub>]<sub>i</sub> [<sub>C'</sub> ich t<sub>i</sub> komme]]  
 b. Ich komme aus dem [<sub>CP</sub> ... Land<sub>k</sub> ... [das Land<sub>k</sub>]<sub>i</sub> [<sub>C'</sub> jeder t<sub>i</sub> kennt]]  
 c. Ich wohne in der [<sub>CP</sub> ... Stadt<sub>k</sub> ... [aus der Stadt<sub>k</sub>]<sub>i</sub> [<sub>C'</sub> du t<sub>i</sub> kommst]]

(53) Structures according to the MA

- a. Jeder kennt das Land<sub>1</sub> [<sub>CP</sub> [aus dem Land<sub>1</sub>]<sub>i</sub> [<sub>C'</sub> ich t<sub>i</sub> komme]]  
 b. Ich komme aus dem Land<sub>1</sub> [<sub>CP</sub> [das Land<sub>1</sub>]<sub>i</sub> [<sub>C'</sub> jeder t<sub>i</sub> kennt]]  
 c. Ich wohne in der Stadt<sub>1</sub> [<sub>CP</sub> [aus der Stadt<sub>1</sub>]<sub>i</sub> [<sub>C'</sub> du t<sub>i</sub> kommst]]

- Importantly, CP-external material is invisible for selection (cf. Borsley 1997)

- (54) a. To, kogo Maria widziała t, jest tajemnicą.  
 that who Maria sees is secret  
*Who Mary saw is a secret.*

(Borsley 1997, ex. 8)

- b. To, kto t nas obserwuje, już nie jest tajemnicą.  
 that who us observes is already not secret  
*Who observes us is no longer a secret.*  
 → something is no longer a secret (viz. that we are observed)  
 -/→ someone is no longer a secret (viz. the NSA)

- NB: there is a version of the RA that faces no such empirical problems, viz. the Raising Analysis à la Schachter 1973 & Vergnaud 1974

(55) The man<sub>k</sub> [RC [DP who man<sub>k</sub>]<sub>i</sub> I like t<sub>i</sub>] is an idiot.

- In this RA-structure, the head noun moves outside the RC to a position in the matrix clause
- Since this version of the RA has a copy of the head noun both in and outside the RC, it captures all the patterns in (51)

(56) Structures according to the RA, Schachter & Vergnaud version

- Jeder kennt das Land<sub>k</sub> [CP [aus dem Land<sub>k</sub>]<sub>i</sub> [C' ich t<sub>i</sub> komme]]
- Ich komme aus dem Land<sub>k</sub> [CP [das Land<sub>k</sub>]<sub>i</sub> [C' jeder t<sub>i</sub> kennt]]
- Ich wohne in der Stadt<sub>k</sub> [CP [aus der Stadt<sub>k</sub>]<sub>i</sub> [C' du t<sub>i</sub> kommst]]

- However, in order to achieve this, some spectacular assumptions are required

(57) a. selectional restrictions are checked after movement  
 b. movement constraints don't count for the purpose of RC-formation  
 c. case assignment works differently in RCs

- Importantly, the MA captures all the patterns without any such assumptions, and everything else being equal is therefore preferred

## 6. Free Relative Clauses

- Research on free relative clauses, cf. (58), has focused on two aspects
  - the location of the free relative pronoun (Head vs. COMP account)
  - the existence of matching effects (categorical, case)

(58) I eat [what you cook t]

- Second-place aspect: the head noun in free relative clauses
  - General answer: some kind of empty element (cf. Riemsdijk 2006, section 3)
  - Specific answer: *pro* (Suner 1984, Grosu 1994)
  - Problem: the choice of *pro* has never been given any empirical justification
- Given the diagnostics of antipronominal contexts, the idea that empty pronouns head free relative clauses receives empirical support because the generalization in (59) holds

(59) *Free relative pronouns are illicit in antipronominal contexts*

(60) manner adverbials

- \* Ich beschäftige mich, **mit was** er t isst.  
 I am.concerned REFL with what he eats  
*I am concerned with what he eats.*
- \* Er isst, **mit was** ich mich beschäftige.  
 he eats with what I REFL am.concerned  
*He speaks with what I am concerned.*
- \* Ich esse, **mit was** ich meine Diss t schrieb.  
 I eat with what I my thesis wrote  
*I eat with what I wrote my thesis.*

- (61) durational adverbials
- \* **Was** er das Stück t geübt hat, ging schnell vorüber.  
what he the piece practiced has went quickly over  
*What he practiced the piece passed by quickly.*
  - \* Er hat das Stück geübt, **was** t schnell vorüber ging.  
he has the piece practiced what quickly over passed  
*He practiced the piece what passed by quickly.*
  - \* Er war weggesperrt, **was** ich den Verlag t leite.  
he was locked.up what I the publishing.house lead  
*He was in prison what I run the publishing house.*
- (62) Er war weggesperrt [<sub>NP</sub> pro [<sub>RC</sub> [was ~~pro~~] ich den Verlag t führe]].

## 7. Some Apparently Problematic Aspects of the Matching Analysis

### 7.1. Missing Base Structures for NPs

- (63) a. the man<sub>1</sub> [<sub>RC</sub> [who ~~man~~<sub>1</sub>]; I like t<sub>i</sub>]  
b. Who (\*man) came to the party?

- Problem: *who* makes a weird determiner because it requires an empty nominal, and such determiners are unattested
- However, this problem is only apparent because such determiners do exist (in German)

- (64) *welche*-indefinites
- Wir suchen Milch; haben Sie hier **welche** (\*Milch)?  
we look.for milk have you here which milk  
*We need milk. Do you have any?*
  - Hier gibt's wohl Einhörner, hab aber noch nie **welche** (\*Einhörner) gesehen.  
here give't well unicorns have but yet never which unicorns seen  
*They say that there are unicorns here, but I have never seen anyone so far.*

- (65) *-en* forms of d-pronouns in German
- Dessen** (\*Kanzlers) Handy wurde abgehört.  
a'. **Des** \*(Kanzlers) Handy wurde abgehört.  
that.GEN chancellor.GEN mobile.phone became intercepted  
*The chancellor's/his mobile phone was intercepted.*
  - Denen** (\*Männern) wurde geholfen.  
b'. **Den** \*(Männern) wurde geholfen.  
the.DAT men.DAT was helped  
*Someone helped the men/them.*

### 7.2. Why is the Noun Internal to the RC Deleted?

- Language particular issue: they can delete one of the two, but need not to

- (66) a. [[themlewu **stuaha** təbəlji <sub>RC</sub>] tha-lə <sub>NP</sub>] qa sətɕ dasa. [=Internally Headed RC]  
they food cooked that-CL I eat finished  
*I ate all the food that they cooked.*
- b. [[**khuə** mi-ta rdze le-m <sub>RC</sub>] **khuə**-le: <sub>NP</sub>] hala. [=Double Headed RC]  
dog person-DAT bite exist-NOM dog-DEF.CL DIR-come  
*The dog who would bite people is coming out.*

(Huang 2008, ex. 13b & ex. 14)

- Why are not both instances of the head noun deleted?  
→ *Remote Erasure Asymmetry Condition* (Postal 2010, p. 95)

### 7.3. Relatives Clauses are Not Generally Insensitive to Antipronominal Contexts

- (67) a. J'ai √**mangé**/\***mangées** des pommes. [French]  
I've eaten eaten.AGR apples  
*I have eaten apples.*
- b. Je les ai \***mangé**/√**mangées**.  
I've them eaten eaten.AGR  
*I have eaten apples.*
- c. Les pommes que j'ai \***mangé**/√**mangées**.  
the apples that I've eaten eaten.AGR  
*The apples I have eaten.*
- (Cinque 1975, fn. 1, exx. (i)-(iii))
- (68) a. \* Der Appetit, **womit** ich t aß, war riesig. [German]  
the appetite what.with I ate was gigantic  
*I ate with enormous appetite.*
- b. \* Das Land, **woraus** er kommt, ist Deutschland.  
the country what.out he comes is Germany  
*The country he comes from is Germany.*
- (69) *Relative clauses with pronominal adverbs as relativizers are sensitive to antipronominal contexts in German*

- Straightforward analysis within Arc Pair Grammar (Johnson & Postal 1980, Pankau 2014)
  - deletion operations license the insertion of a pronominal
  - French requires this insertion, German optionally allows it in PPs, giving rise to relative clauses with pronominal adverbs as relativizers

### 8. References

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