

# English and the Typology of Nonrestrictive Relative Clauses

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## Restrictive vs. nonrestrictive

(1) The conference which I plan to attend is in Waterloo.

- ▶ Relative clause attaches somewhere within NP.
- ▶ Relative clause denotes a property; sister denotes a property.
- ▶ Conjunction of properties → restrictive interpretation.

(2) The conference, which I plan to attend, is in Waterloo.

- ▶ Something else. . .

## Two views of nonrestrictive syntax/semantics

1. NRRCs are attached to the constituent they modify, just like RRCs, but they modify different things and/or in a different way (the **compositional** view).
2. NRRCs are independent sentences, and relative pronouns are E-type pronouns, somehow pronounced internal to their host sentences (the **discourse** view).

# Both can be right

- ▶ Cinque (2008) discusses several apparent differences in the predictions of the two approaches. For example:
  - ▶ **Adjacency**: Do NRRCs occur next to their hosts?
    - ▶ Compositional: Yes (*modulo* extraposition — see below)
    - ▶ Discourse: Not necessarily
  - ▶ **Category-neutrality**: Do NRRCs modify any category, or just NP?
    - ▶ Compositional: Just NP (not necessarily — see Jackendoff 1977 — but category restrictions are at least unsurprising)
    - ▶ Discourse: Anything which can be referred to with an E-type pronoun

## Both can be right

- ▶ Cinque claims that Italian *cui*-relatives match the compositional predictions, and *il quale*-relatives match the discourse predictions.

### *Cui* needs adjacency; *Il quale* doesn't

- (3) Da quando **i russi** se ne sono andati, **i quali/\*che** non si erano mai veramente integrati con la popolazione, la pace è finita.  
Since the Russians left, who had never really mixed with the population, there is no more peace.

### *Cui* only modifies NP; *Il quale* doesn't care

- (4) Carlo lavora troppo poco. La qual cosa/\*che verrà certamente notata.  
Carlo works too little. Which will certainly be noticed.

## So far, so good

- ▶ We should be happy about this. There is nothing wrong *a priori* with either analysis, so if both structures are attested, we can stop worrying.
- ▶ In general, if anything as complex and constructional as NRRCs were cross-linguistically completely uniform, we should panic.
- ▶ But Cinque is still suboptimal in this respect: he correlates two logically independent factors:
  1. Attachment site (pure syntax);
  2. Relations between relative pronoun and antecedent (lexical semantics of relative pronoun).

# English NRRCs

- ▶ Cinque claims that English NRRCs are discourse modifiers, like *il quale*-relatives.

## Category-neutral

- (5) a. That Sheila was beautiful, which she was, was not realized until later.
- b. Solving this problem will take from now until doomsday, which is more time than we've got. (Jackendoff 1977:171)

## No adjacency requirement

- (6) a. She borrowed a history book. Which suggests that her teacher was having some influence on her.
- b. Only the flower is used, which is not poisonous and is attached to the plant with a very fine stem.

# WAIT A MINUTE

- ▶ The category-neutrality of English NRRCs is uncontroversial.
- ▶ The lack of adjacency requirement **is** controversial. Almost all of Cinque's examples of nonadjacency fall into two classes:
  1. Sentence-initial relative clauses (6a);
  2. Relative clauses adjacent to the trace of an internal subject (6b)
- ▶ Cinque's data could still be covered if there were a general adjacency requirement, supplemented with something special for "continuative" relative clauses, and an extraposition mechanism sensitive to the internal/external argument distinction. We will need both of those anyway.



# RLIs

- ▶ One reason to prefer this alternative is because English used to have a construction, the **Relative with a Leftward Island**, or RLI, which could only exist if there were no necessary syntactic relation (like whatever underpins adjacency) between an NRRC and its antecedent.
- ▶ The disappearance of RLIs is plausibly pegged to the introduction of an adjacency requirement.
- ▶ As the adjacency requirement takes hold, the only sources of nonadjacency are the above.
- ▶ By comparing the distribution of nonadjacent NRRCs in the RLI era and the post-RLI era, we can therefore find out something about constraints on extraposition and continuative relatives.

# Roadmap

1. Find out what an RLI is.
2. Examine patterns of nonadjacency around the time of their disappearance.
3. See if those patterns fit with other work on extraposition (and continuative relatives, but no-one talks about those). Make them fit.
4. Come back to Cinque, and rejoice because things are better now (empirically and conceptually).

## Relatives with a Leftward Island

- ▶ An RLI is a tricausal variant of a continuative relative clause (Truswell 2011).
- ▶ Attested from 1500–c.1850, across a range of registers, but plausibly never universal across the population.
- ▶ First clause is or contains the antecedent; second clause contains the relative pronoun and gap, and is left-adjoined to the third clause.

Mr Hoby, my Mother, and my selfe, went to visitt some freindes

*Antecedent clause*

who, \_\_\_\_\_ beinge not at home, we retourned

*Adjoined clause*

*Host clause*

*Relative with a Leftward Island*

## Left-adjunction

- ▶ The left-adjoined structure is independent of the relativization: every RLI is built from an independently available left-adjoined structure.
- (7)
- a. **RLI:** Mr Hoby, my Mother, and my selfe, went to visitt some freindes **[[who, \_\_\_\_ being not at home], we returned]** (Lady Margaret Hoby, *Diary*, 1599–1601)
  - b. **Non-RLI:** three or four Male-Carps will follow a Female; and . . . then **[[she putting on a seeming coyeness], they force her through weeds and flags]** (Izaak Walton, *The Compleat Angler*, 1676)

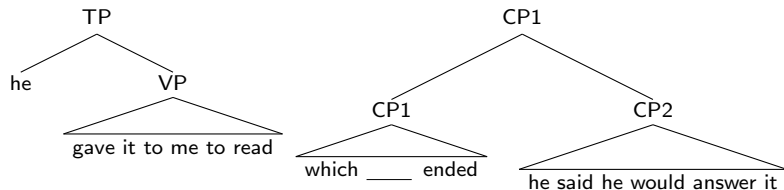
# Left-adjunction

- ▶ If a constituent cannot occur independently in the left-adjointed position, it cannot occur there in an RLI either.

- (8) a. \*John, who and Bill we saw last night.  
b. \*John, who winning the race was unexpected.

- ▶ This tells us that the following two things are independent (either can occur without the other):
  1. The A'-dependency;
  2. The left-adjunction structure.
- ▶ This, in turn, means that the A'-dependency is buried within a left-adjointed clause, adjoined to a host that bears no syntactic relationship to the antecedent clause. There can be **no syntactic dependency** between an RLI and its antecedent.

# Gross RLI structure

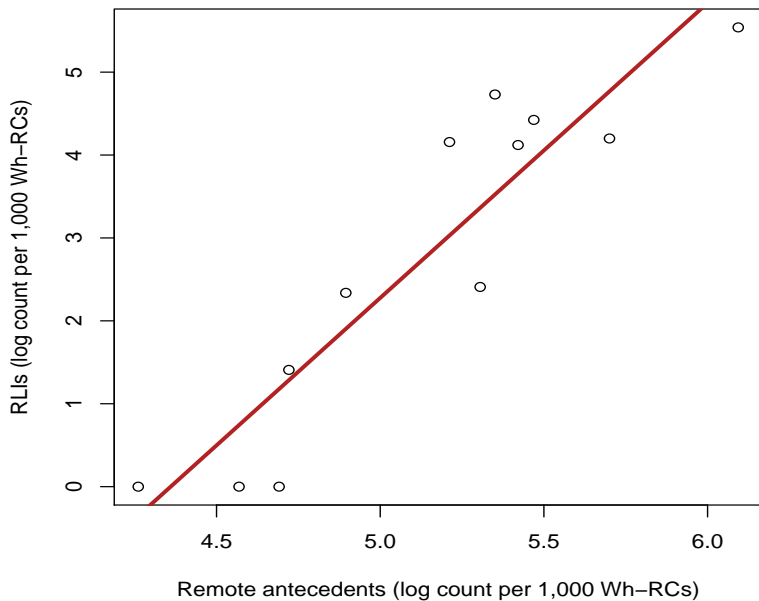


- ▶ An accurate analysis of RLIs therefore commits us to the availability of Cinque's discourse NRRCs (no syntactic relation between antecedent and NRRC).
- ▶ An adjacency requirement would render RLIs impossible.

## Remote antecedents

- ▶ NRRCs with remote antecedents are pretty common in the 16th–18th centuries.
  - (9)
    - a. **We** haue cause also in England to beware of vnkindnesse, [**who** haue had, in so fewe yeares, the Candel of Goddes worde, so oft lightned, so oft put out, and. . .]
    - b. Learning is, both hindred and iniured too by the ill choice of them, that send **yong scholars** to the vniuersities. [Of **whom** must nedes cum all oure Diuines, Lawyers, and Physicians.] (both Roger Ascham, *The Scholemaster*, 1563–8)
- ▶ The log frequency of RLIs in a text strongly correlates with the log frequency of remote antecedents (12 texts, distributed evenly from 1500–1710, selected for high/low frequency of RLIs, adjusted  $r^2 = 0.83$ ,  $p = 2.2 \times 10^{-5}$ ).

## The correlation





# The noise

- ▶ Texts with no RLIs still have quite a few remote antecedents.
- ▶ This is unsurprising: extraposition is a common mechanism for separating an RC from its antecedent.
- ▶ The distinction is between texts where the only remote antecedents are derived from extraposition, and texts where remote antecedents are available independently of extraposition.

# The distribution of extraposition

- ▶ We could clean up the data by separating out those dependencies between RC and antecedent which violate constraints on extraposition.
- ▶ Two types of constraints on extraposition:
  1. Hard constraints (Right Roof Constraint, Ross 1967; no extraposition of appositives, Ziv 1973);
  2. Soft constraints: information-structural effects will tend to militate in favour of extraposition from internal arguments (Guéron 1980) and extraposition from indefinite NPs (Ziv & Cole 1974, Guéron 1980); weight effects (Francis 2010, Francis & Michaelis 2011)

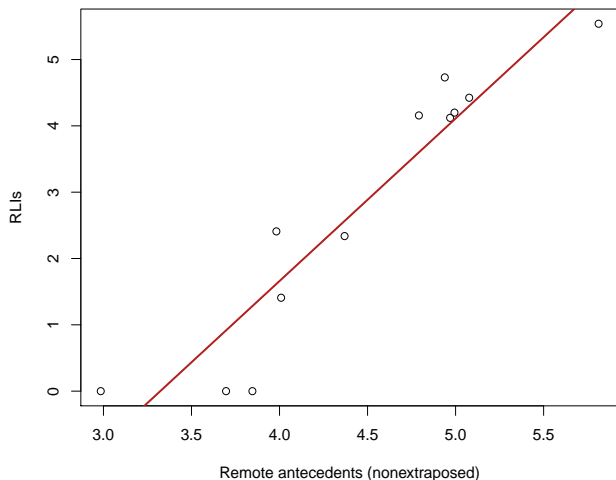
## The upshot of all that ink

- ▶ We shouldn't be surprised by remote antecedents like these:
  - (10)
    - a. **something** was absent **which** thou didst desire
    - b. Do **they**, let me ask thee, seem to wander **who** endeavour to put themselves into a Condition of wanting nothing?
  - ▶ ... but remote antecedents like these violate hard and/or soft constraints and so are cause for surprise:
    - (11)
      - a. “No more,” said Sir Thomas Moore, as **master Riche** reported of him, “could the parliament make the kinge Supreame head of the churche.” Vppon **whose** onlye reporte was Sir Thomas Moore indicted of treason
      - b. **they** there preach'd to him, and all in that assembly, the tidings of Salvation. **Whom** having heard attentively, the King thus answer'd

# Surprisingness

- ▶ We operationalize the distinction between the surprising and unsurprising cases as follows: a dependency between a relative and a remote antecedent is **unsurprising** (plausibly a result of extraposition) iff:
  1. The antecedent is an internal argument and/or intransitive subject (crude approximation of Guéron's possible "presentational focus");
  2. The relative clause is restrictive; **and**
  3. The dependency obeys the Right Roof Constraint.
- ▶ A dependency between a relative and a remote antecedent is **surprising** (and not plausibly a result of extraposition) iff it is not unsurprising.
- ▶ This defines 80 of the 95 remote antecedents in the corpus after the last RLI (1859–1913) as unsurprising.
- ▶ The definition mixes hard and soft constraints, and could clearly be finessed (we would learn a lot about extraposition), but not today.

## RLIs vs. Surprisingness



- ▶ Same 12 texts as before, log frequencies as before,  
 $r^2 = 0.87, p = 5.1 \times 10^{-6}$

## Continuative relative clauses

- ▶ Conclusion: to the extent a text contains RLIs, it also contains remote antecedents which cannot be explained by an extraposition constrained in the standard way.
- ▶ An unexplained, probably important detail: a good proportion of these examples are **continuative**, in Jespersen's sense.

- (12)
- His horse threw him. Which a young gentlewoman seeing fell a laughing.
  - “Well,” said **he**, “I pray god, sonne Roper, some of vs live not till that day” . . . To **whom** I said: “By my troth, sir, it is very desperately spoken.”

This is not predicted by the current discussion — more to do.

## Category-neutrality

- ▶ RLIs are neutral with respect to their antecedent's category.
  - (13) they went about to slay him. Which when the brethren knewe, they brought him downe to Cesarea, and sent him forth to Tarsus
- ▶ I have not checked directly that surprising remote antecedents are category-neutral, but given the evidence that they are manifestations of the same underlying phenomenon as RLIs, we should expect that they are.

## NRRCs: the third way

- ▶ So 16th–18th century English NRRCs exemplify Cinque's discourse NRRCs.
  - ▶ They are category-neutral.
  - ▶ They can take remote antecedents.
- ▶ The decline of RLs and surprising remote antecedents tells us that this is **not** true of Present-Day English: still category-neutral, but no remote antecedents, except for extraposition.
- ▶ So English has come to exemplify a third type of NRRC, intermediate between Cinque's two types. Cinque was misled by failure to fully consider extraposition.



## No double dissociation

- ▶ Present-Day English demonstrates that category-neutrality can be partially dissociated from remote antecedents: the former can occur without the latter.
- ▶ This is a good thing: we do not expect a syntactic fact to be related to a discourse semantic fact, so the refinement to Cinque's typology should be welcome.
- ▶ The other dissociation (remote antecedents without category neutrality) is unattested in Cinque's research or in mine: there is no language in which NRRCs must attach to NP but can modify a constituent other than the one to which they are attached. This is intuitively unsurprising but not yet explained.

## Sketch of analysis (for the future)

1. 16th–18th century NRRCs with surprising remote antecedents occur clause-finally (one well-defined class of exceptions);
2. This is because they are actually separate clauses (Truswell 2011), finding their antecedents with no help from syntax.
3. Ziv & Cole (1974): these independent NRRCs must assert independent propositions, while NP-adjoined NRRCs are appositive modifiers.
4. So the absence of NP-adjoined NRRCs with remote antecedents follows from a correlation between syntactic position and semantic interpretation, and ultimately from the difference between appositive and continuative RCs.

# Conclusions

## Conclusion 1:

Remote antecedents	Adnominal only	Category neutral
Yes	—	<i>Il quale / which (16th–18th c.)</i>
No	<i>Cui</i>	<i>Which (19th–21st c.)</i>

Conclusion 2: We should be happy about this.

Conclusion 3: It does sharply point out some things we don't know about NRRCs, though.

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