Truly Intrusive
Resumption in Relative Clauses

Dora Alexopoulou
Marie Curie Fellow
CNRS Lab Savoirs, Textes, Langage
Lille III
Aims/Overview

Revisit the relationship between intrusive and true resumption.

- True/grammatical resumption
- Intrusive resumption and “mixed” chains
- Hypothesis: grammatical resumption as the grammaticisation of un-mixed chains
- Agreement and the grammaticisation of resumption
Grammatical (true) resumption

(1) the girl that I met (*her) at the party

Irish
(2a) an ghirseach a ghoid na síogaí
     the girl aL stole the fairies

(2b) an ghirseach a-r ghoid na síogaí í
     the girl aN-[past] stole the fairies her

(McCloskey 2002)
(3a) ha-?iš še- ra?iti (?oto)
   the-man that-(l) saw (him)

(3b) ha-?iš še- xašavt še-(hu) melemed ?anglit
   the-man that-(you.F) thought that-(he) teaches English
   (Shlonsky 1992)
4a) *to pedhi pu *0/tu dhanises lefta
the kid that it-gen lent-2s money
the kid you lent money to

4b) *o fititis pu dhanistika to aftokinito *0/tu
the student that borrowed-1s the car his
the student whose car I borrowed

5) *l-bint ?illi shufti-*gap/ha
the-girl that saw-2s.fem-her
the girl you saw
On the nature of C:
(I) Merge vs. Move

Ia: Merge

- Absence of an Op/uWh feature on C, no Agree/Move (McCloskey 2002).
- Island insensitivity of resumptive structures.
- Antiagreement effects
- Semitic, Celtic relative clauses, Greek NRRs.
Irish

(2a) an ghirseach a ghoid na síogaí
    the girl aL stole the fairies

(2b) an ghirseach a-r ghoid na síogaí í
    the girl aN-[past] stole the fairies her
Islands

(i) ne dànta sin nach bhfuil fhios againn cén an n-gi is knowledge at-us what áit ar cumadh iad place comp were-composed them those poems that we do not know where they were composed
Antiagreement

(i) A Alec, tusa a bhfuil an Béarla aige
   Hey Alec, you aN is the English at Him
   Hey, Alec---you that Know(s) English.

(ii) Is sinne an bheirt ghasúr a-r dhíol tú ár lóistín
    cop-pres we the two boy aN-past paid you our lodging
    We are the boys that you paid our lodging.
The nature of C:  
II agreement features on C

C endowed with phi-features (Greek, Semitic).

Agreement of phi-features between C and in-situ element

Greek: resumption in non-argument positions for pou-relatives but sensitivity to islands.

Semitic: Highest subject restriction.
(i) *kanenas pu irthe sto parti de mu ekane kali ediposi noone-nom that came to-the party not me made good impression

- pou-clauses resist nominalisation in contrast to questions, na-clauses and oti-clauses (Roussou 1994, Christides 1986).
(i) pianu eklepsan to aftokinito
    who-gen stole-3pl the car
    whose did they steal the car? (Whose car was stolen?)

(ii) I yineka tis opias eklepsan to aftokinito
    the woman the-gen whose-gen stole-3pl the car
    the woman whose car was stolen

(iii) I yineka pu tis eklepsan to aftokinito
    the woman that her stole the car
Resumption per se does NOT obviate islands

xiii) *i kopela pu xerume ton tipo pu tis harise to vrahioli
   the girl that know-1pl the guy that her donated the bracelet

xiv) i Maria, pu xerume ton tipo pu tis edhose ta lefta
   The Maria, that know-1pl the guy that her gave-3s the money
   Maria, who we know the guy who gave her the money.
Lebanese Arabic (Aoun and Choueiri 1997)

(i) l-kteeb *(yalli) Ftarayto mbeeriH Daa£
    the-book comp bought-1sg-it yesterday is-lost-3sg
    The book that I bought yesterday is lost.

(ii) £am fattiF £a kteeb (*yalli) Dayya£t-o l-yom
    Asp look-1sg for book Comp lost-1sg-it today
    I am looking for a book that I lost today.
The mystery

There is also a deep mystery lying at the bottom of it all. It is known that resumptive elements may serve the purpose of marking variable positions in unbounded dependency constructions. It is known that resumptive elements may occur in positions from which movement is impossible (hence apparently allowing greater expressive power than is permitted by movement alone). It is also known that resumption imposes a considerably lighter burden on the human sentence processor than does the production and resolution of syntactic movement configurations. Why, then, is movement used at all in the creation of these structures? (McCloskey 2006, p.19).
Resumption is not licensed; it is negatively defined through the absence of movement.

No random distribution in the Move/Merge option: resumption is an optional extra in grammars.

Asymmetry between relative clauses and questions; resumption generally dispreferred in questions—Lebanese Arabic (Boexc 2003).

Variation relates to C not the pronominal.
Resumption is the result of shifting from mixed (resumptive) chains, involving movement but a locally provided argument to structures where movement is dispensed with.

A crucial trigger for this process is the involvement of phi-features on C and the availability of clitic pronominals that can be analysed as verbal agreement.
Locality and resumption

(i) This is the woman whom Emsowrth told me when he will invite him.

(ii) O Janis ine o adras pu i Maria efije apo to party otan ton ide
    the Yanis is the man that the Maria left from the party when him saw.

Experimental design

**ISLAND**: no-island (that-clause)
weak-island (whether-clause)
strong island (relative clause)

**EMBEDDING**: single, double

**RESUMPTIVE**: gap, pronoun

**Control condition**: zero embedding

$3 \times 2 \times 2 = 12 + 2$ control conditions $= 14$ cells

(English: extra condition with “no-that”-clause)
Intrusive resumption in that-clauses

Who will we fire (him)?

Who does Mary claim (that) we will fire (him)?

Who does Jane think (that) Mary claims (that) we will fire (him)?
Intrusive Resumption

Resumption and that-clauses in German, English and Greek

Graphs showing the mean acceptability of resumptive and non-resumptive constructions across different numbers of embeddings.
Resumption and weak islands

Who will we fire (him)?

Who does Mary wonder whether we will fire (him)?

Who does Jane think that Mary wonders whether we will fire (him)?
Intrusive Resumption

Resumption and weak islands in German, English and Greek:
Resumption and strong islands

Who will we fire (him)?

Who does Mary meet the people that will fire (him)?

Who does Jane think that Mary meets the people that will fire (him)?
Intrusive Resumption
Resumption and strong islands in German, English and Greek

Resumption and strong islands in German, English and Greek

![Graphs showing mean acceptability (logs) against number of embeddings for resumptive and non-resumptive cases in German, English, and Greek.](image)
Resumption and islands

- Pronominals are more acceptable in embedded positions.
- Pronominals reverse the weak island effect.
- Pronominals are at best as acceptable as gaps (see also McDaniel & Cowart 1999 for English relative clauses).
- Pronominals ARE sensitive to islands.
The processing complexity of A-bar dependencies

Gibson 1998:

- Memory costs: the more material intervenes between a filler and the point of its resolution the higher the complexity of the structure.
- Integration costs: incurred locally, at the point of resolution, depending on the type of the item that is integrated and its distance from the filler.
- Memory costs are calculated on the basis of discourse referents.
Alexopoulou and Keller 2007: Syntax matters

- Syntactic heads are the relevant unit for the calculation of memory costs.

- Cyclicity is central to the complexity of A-bar dependencies: additional costs are incurred by carrying a filler over to a new clause due to the integration of the intermediate trace on C (Frazier & Clifton 1989).
Embedding: lower acceptability of long-distance wh-questions.

(1) Who will we fire?
(2a) Who does Mary think we will fire?
(2b) Who does Jane claim that Mary thinks that we will fire?
(3a) Who does Mary wonder whether we will fire?
(3b) Who does Jane think that Mary wonders whether we will fire?
The interaction of two scope domains in weak islands leads to increased integration costs due to the integration of a new scope domain (Manzini 1998, Szabolsci and Zwarts 1993).

(4) Who does Mary think that we will fire?
(5) Who does Mary wonder whether we will fire?
Resort to an anaphoric non-cyclic resolution of the A-bar dependency by means of a resumptive pronominal leads to a partial redemption of costs incurred by a cyclic derivation.

Embedded pronominals more acceptable than non-embedded ones (but at most as acceptable as gaps).

(6) Who will we fire him?
(7) Who does Mary think that we will fire him?
(8) Who does Mary wonder whether we will fire him?
Movement per se does not save islands.

Mixed chains.

The difference between a true and intrusive grammar relates to C.

True resumption as the grammaticisation of intrusive resumption (Hawkins 2005, Ariel 1999).
- Resumption is not licensed; it is negatively defined through the absence of movement.
- Variation relates to C not the pronominal.
- No random distribution in the Move/Merge option: resumption is an optional extra in grammars.
- Asymmetry between relative clauses and questions; resumption generally dispreferred in questions—Lebanese Arabic (Boexc 2003).
C with phi-features
Pronouns that are clitics/agreement markers
Generalised mixed chains
(i) ?al-rajul-u **IlâDîi** ra?aytu-(hu)
the-man-nom comp.msc.sg saw-1sg-(him)
the man that I saw
(ii) ?al-mar?at-u **llatîi** ra?aytu-(ha)
the-woman-nom comp-fem.sg saw-1sg-(her)
the woman that I saw
(iii) ?al-?awlaad-u **IlâDiîna** ra?aytu-(hum)
the-boys-nom comp.msc.pl saw-1sg-(them.msc)
the boys that I saw
(iv) ?al-nisa?-u **Ilawaâti** ra?aytu-(hunna)
the-women-nom comp-fem.pl saw-1sg-(them-fem)
the women that I saw
(vi) ?al-waladaani **IaaDaani** ra?aytu-(huma)
the-boys-dual.nom comp.msc.dual
saw-1sg-(them-dual)
the two boys that I saw
(Shlonsky 1992: the gap structure is illicit in islands).
What about relatives vs. questions.

A merged operator needs to be identified/interpreted.

The head of the relative provides a natural antecedent.

This option is unavailable in questions.
Conclusion

- The fundamental difference between true and intrusive resumption is the absence of movement from the former.
- If resumption can indeed be shown to be the result of a shift from a mixed chain to a chain where movement is cancelled altogether, then the parametric account of resumption will be reduced to the agreement properties of C and the pronominals and the option of merging an operator will be a consequence of these settings, rather than a true parametric option.
- But, the case still has to be made on the basis of historical data.
- Reconstruction data need to be addressed.