



Resumption as Resource Management

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Thank You

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Resource Sensitivity

- Hypothesis (*Resource Sensitivity*):
Natural language is universally resource-sensitive.



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 - (1) This innocent man is allegedly guilty.
≠ This allegedly innocent man is allegedly guilty.

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- **Semantic composition**
 - (1) This innocent man is allegedly guilty.
≠ This allegedly innocent man is allegedly guilty.
- Resource logic for semantic composition: **linear logic**
 - Substructural perspective:
contraction ✗, weakening ✗, commutativity ✓

Logical v. Linguistic Resource Sensitivity

- Logic of linear implication (\multimap):
 - logical resource sensitivity
- Add conjunction (\otimes):
 - logical RS no longer sufficient
- Why add conjunction?
 - Pronouns $\lambda z.z \times z : A \multimap (A \otimes P)$

Logical v. Linguistic Resource Sensitivity

- Logic of linear implication (\multimap):
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 - logical RS no longer sufficient
- Why add conjunction?
 - Pronouns $\lambda z.z \times z : A \multimap (A \otimes P)$
- **Linguistic resource sensitivity**
 - Add linguistically motivated goal condition:
 $\Gamma \vdash \phi : s_t$

Resumption

- Grammaticalized resumptive pronouns

- (2) an ghirseach ar ghoid na síogaí í
the girl C.PAST stole the fairies her
the girl that the fairies stole away (McCloskey 2002)

- Copy raising

- (3) Every baby seemed like she'd eaten most of
the crackers.
- (4) *Every baby seemed like I'd eaten most of the
crackers.

Resource Management

$$\frac{A \quad \frac{A \multimap (A \otimes P) \quad [A \multimap (A \otimes P)] \multimap (A \multimap A)}{A \multimap A} \multimap \varepsilon}{A} \multimap \varepsilon$$

Resource Management

Lexical contributions

Antecedent

Pronoun

Manager resource

$$\frac{
 \frac{
 \frac{
 A \multimap (A \otimes P)
 }{A}
 }{A}
 }{A}
 \quad
 \frac{
 [A \multimap (A \otimes P)] \multimap (A \multimap A)
 }{A \multimap A}
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 \text{Step 1}$$

Step 1 Manager resource removes pronoun

Resource Management

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$$\frac{A \quad \frac{A \multimap (A \otimes P) \quad [A \multimap (A \otimes P)] \multimap (A \multimap A)}{A \multimap A} \multimap_{\varepsilon} \text{Step 1}}{A \quad \frac{A \multimap A}{A} \multimap_{\varepsilon} \text{Step 2}} \multimap_{\varepsilon}$$

Step 1 Manager resource removes pronoun

Step 2 Result of removal combines with antecedent

Final result: antecedent ✓, pronoun ✗



Theoretical Implications

1. Logical understanding of linguistic principles
2. Lexicon = locus of resumptive-licensing
3. Unification of resumption environments



Empirical Predictions

1. Resumptives have the form of ordinary pronouns
2. Resumptives have the interpretation of ordinary pronouns
3. Resumptive unbounded dependencies are not island-sensitive
4. Resumptive licensors may be distinguished by morphology or lexical class
5. Formal explanation of why *anaphoric* elements are used resumptively



Processing

- Intrusive Pronouns

- (5) I met **a / the** linguist that Kate forgot if Thora had seen him before.
- (6) *I met **every** linguist that Kate forgot if Thora had seen him before.

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- Processing model:

- Production

- Incremental wellformedness: local > global

- Parsing

- Partial interpretation: informative v. uninformative



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