

Grammar, comprehension & production

LING 611 Spring 2021

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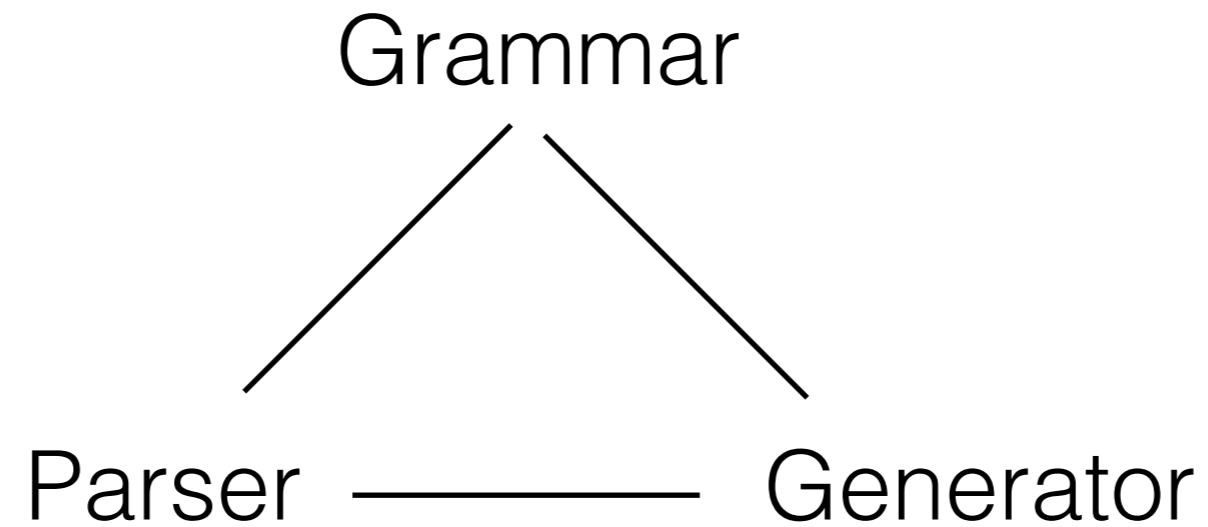
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3/23/2022

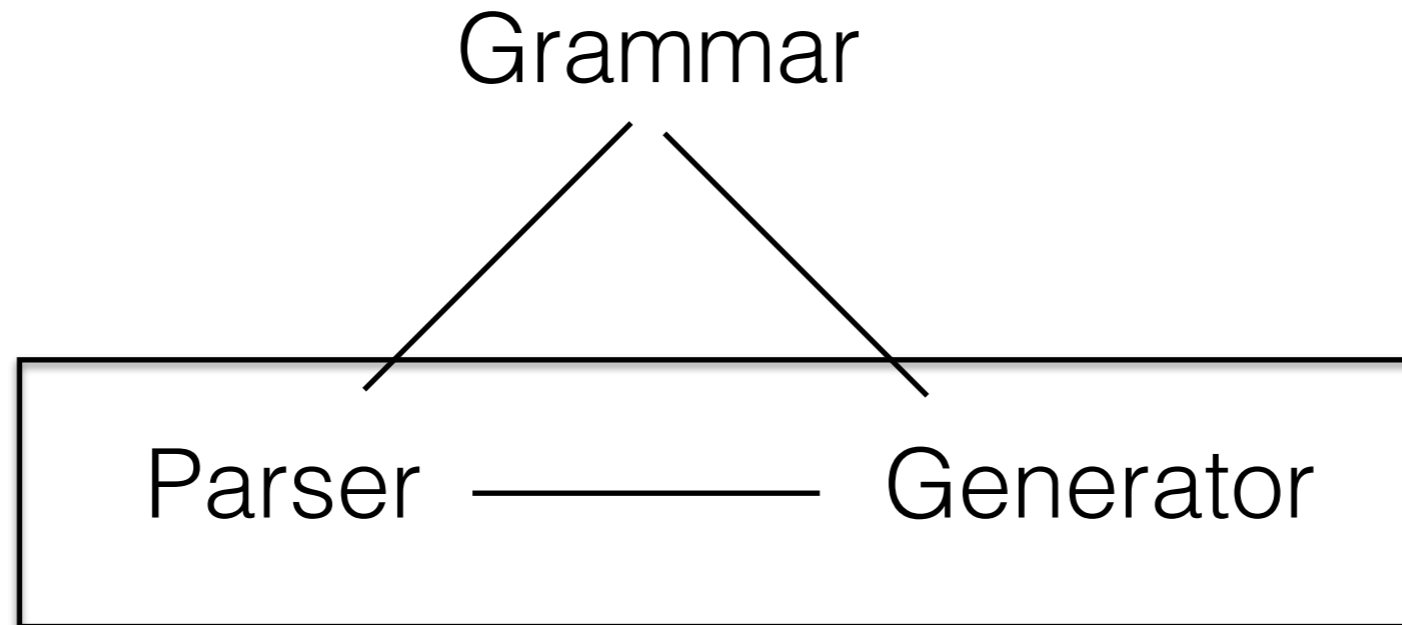
Parser-grammar relation

- One system hypothesis vs. two system hypothesis
- Alignment and misalignment as key empirical phenomena for evaluating those two views.

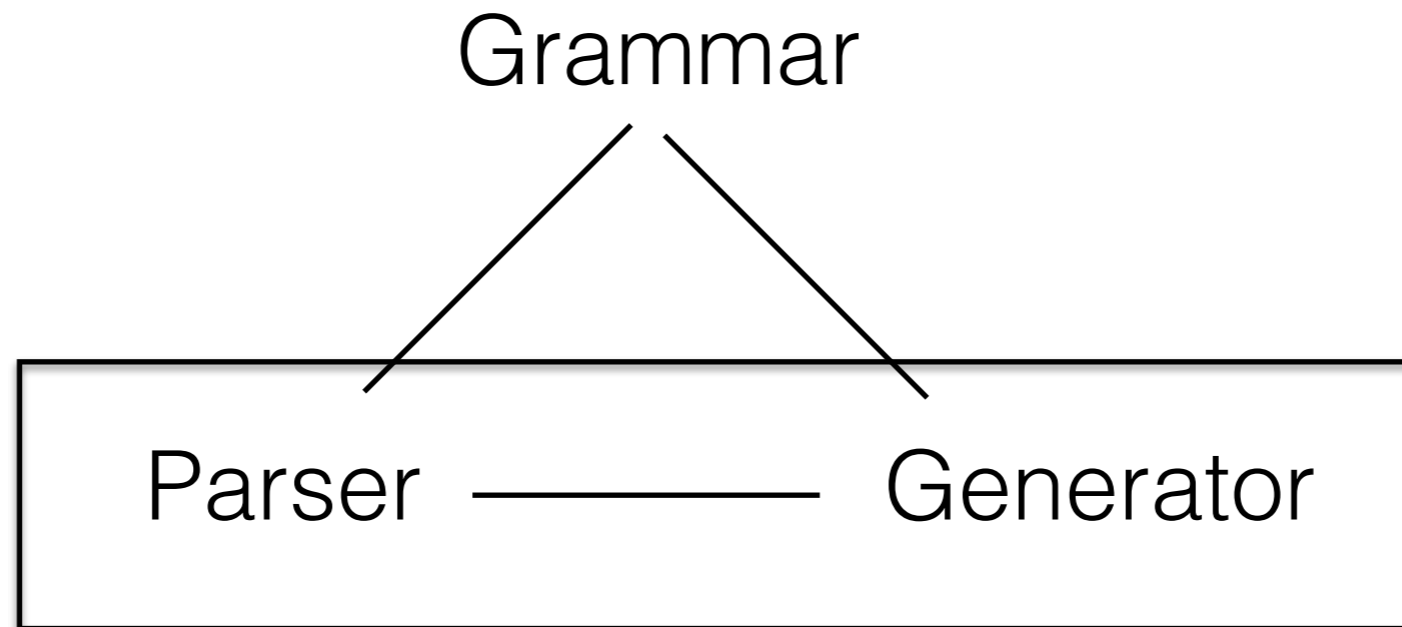
Parser-generator relation



Parser-generator relation



Parser-generator relation



- Neurobiological dissociation?
- Development dissociation?
- Some comprehension-/production- specific phenomena?

A case study: resumptive pronouns

Relative clause island

? Which woman did Carlos report that the newscaster who exposed the criminal threatened **her**?










Adjunct island

? Which woman did Carlos report that, when the newscaster exposed **her**, the criminal threatened the detective's case?










Wh-island

? Which woman did Carlos question how the newscaster exposed **her**?

Eliciting resumptive pronouns










Figure 1: Paradigm to Elicit Island + Resumptive Sentences		
1 st Question	2 nd Question	3 rd Question (response analyzed)
 <p>←What is This?</p>  <p>-lives in Brazil</p>  <p>-I don't know</p>	  <p>←What is this?</p>  <p>-I don't know</p>	   <p>←What is this?</p>
Target sentence: "This is a donkey that lives In California."	Target sentence: "This is a donkey that lives In Brazil."	Target sentence: "This is a donkey that I don't know where it lives."

Eliciting resumptive pronouns

Figure 1: Paradigm to			Control sentences
1 st Question	2 nd Question	3 rd Question (response analyzed)	
 <p>←What is This?</p>  <p>-lives in Brazil</p>  <p>Doesn't know</p>	  <p>←What is this?</p>  <p>Doesn't know</p>	   <p>←What is this?</p>	
Target sentence: "This is a donkey that lives In California."	Target sentence: "This is a donkey that lives In Brazil."	Target sentence: "This is a donkey that I don't know where it lives."	

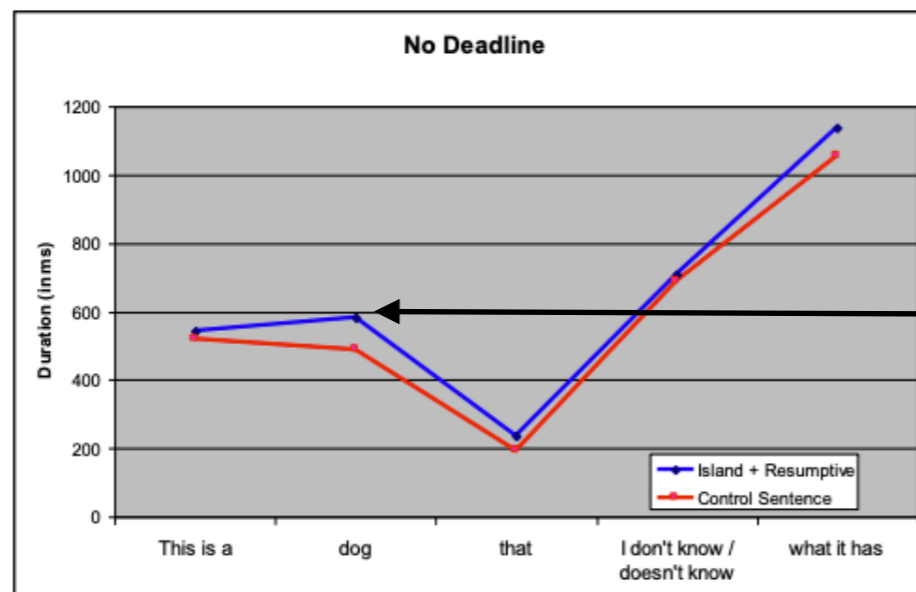
Production of resumptive pronouns

In the island + resumptive condition that was designed to elicit island + resumptive sentences, about 67% of all utterances were of the desired type. This finding is actually quite striking considering that the form is not very acceptable (more on this point later). In the deadline experiment, the percentage of sentences of this type dropped to 56%. Surprisingly, then, people are less likely to produce this marginal structure when they are under time pressure, a finding which goes against the general belief that the island + resumptive structure is produced when people do not plan properly and so essentially paint themselves into a syntactic corner (Creswell, 2002)

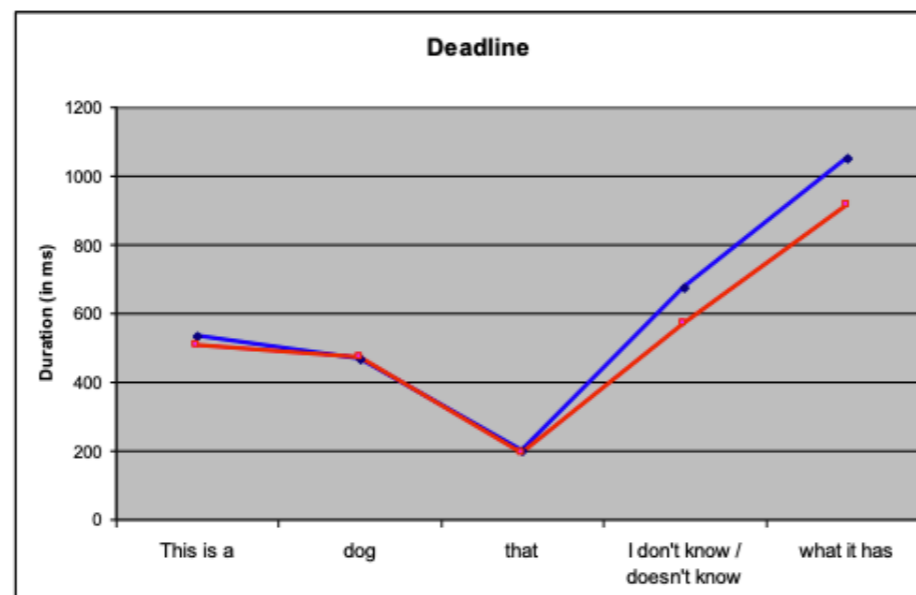
Figure 1: Paradigm to Elicit Island + Resumptive Sentences		
1 st Question	2 nd Question	3 rd Question (response analyzed)
 ←What is This?  -lives in Brazil  -I don't know	  ←What is this?  -I don't know	   ←What is this?
Target sentence: "This is a donkey that lives In California."	Target sentence: "This is a donkey that lives In Brazil."	Target sentence: "This is a donkey that I don't know where it lives."

Production time-course

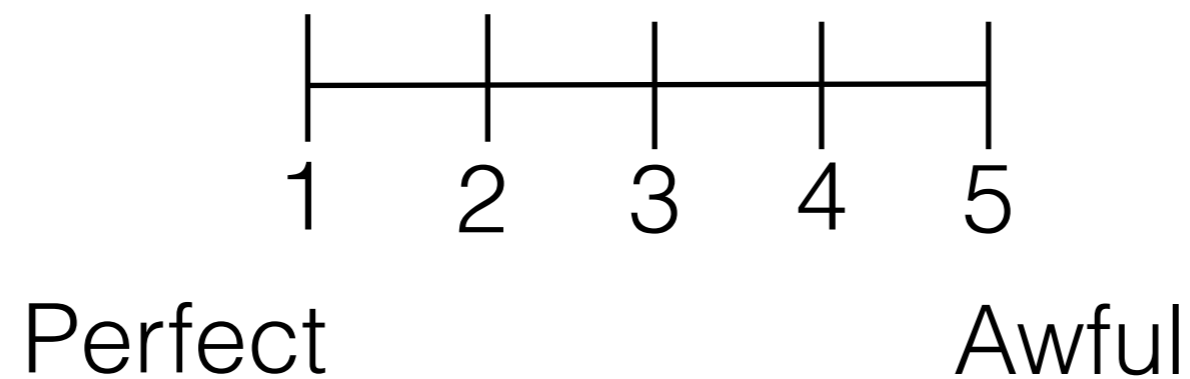
- a. [This is a] [donkey] [that] [I don't know] [where it lives].
— b. [This is a] [donkey] [that] [doesn't know] [where it lives].



Speakers seem to be planning the island +resumptive structure already at the relative clause head?



Acceptability



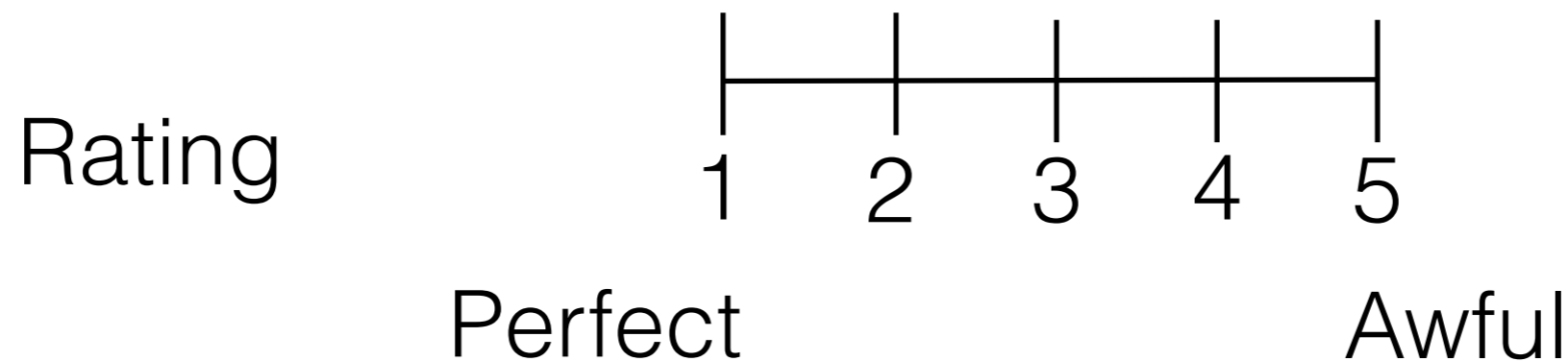
	Written	Spoken
a. [This is a] [donkey] [that] [I don't know] [where it lives].	3.0	3.3
b. [This is a] [donkey] [that] [doesn't know] [where it lives].	1.7	1.9

Resumptive pronoun

- Poll: which sentences do you like better?
- Which woman did Carlos report that the newscaster who exposed threatened the detective's case?
- Which woman did Carlos report that the newscaster who exposed her threatened the detective's case?

Task-difference?

Rating vs. forced choice



Forced choice

(2) a. *Island*

Which woman did Carlos report that [_{island} the newscaster who exposed **her/Ø**] threatened the detective's case?

b. *Nonisland*

Which woman did Carlos report that [_{island} the newscaster who exposed the criminal] threatened **her/Ø**?

(4) Which woman did Carlos report that the newscaster who ____ threatened the detective's case?
exposed exposed her

Forced choice results

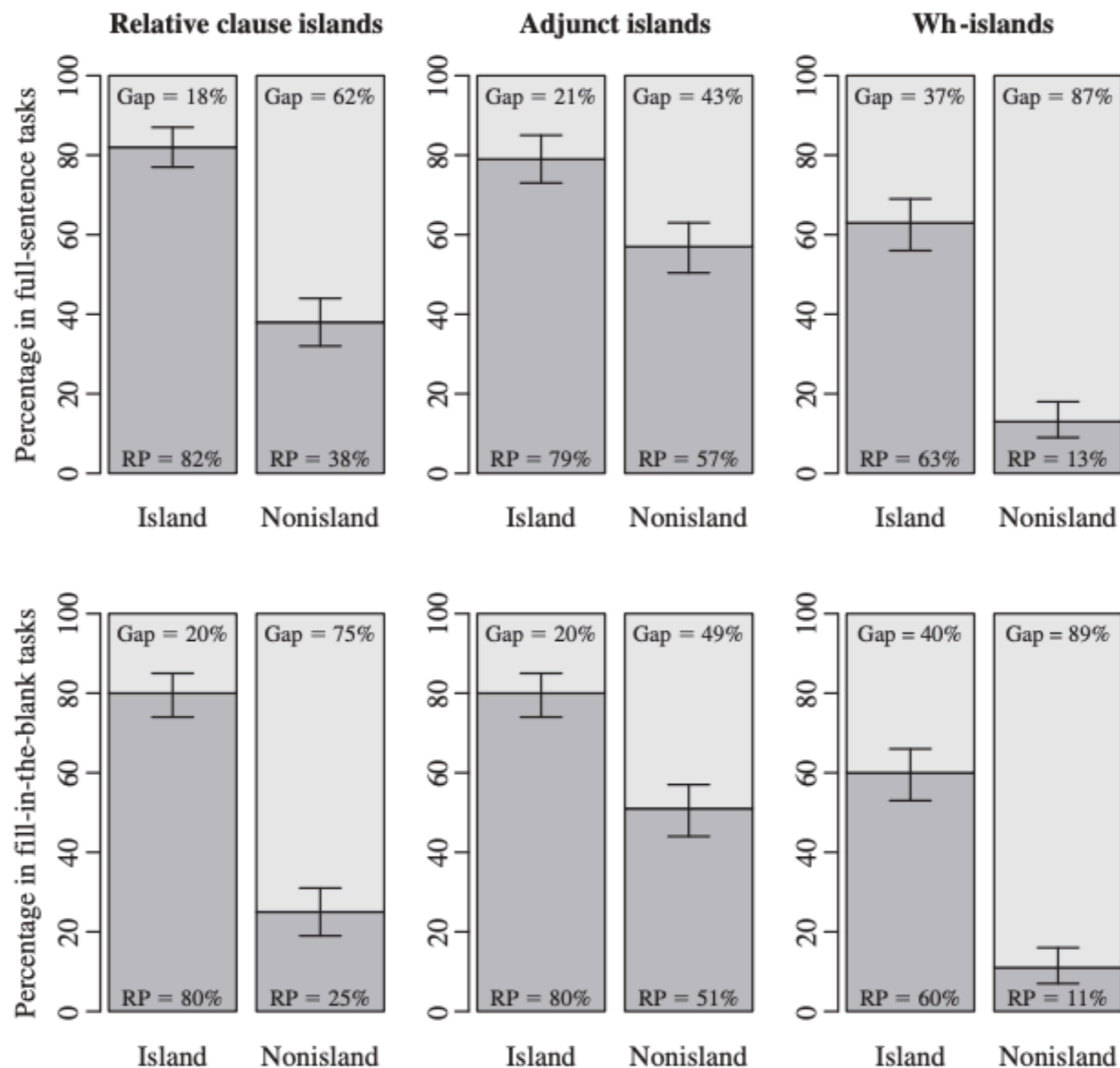


Figure 1

Proportion of resumptive pronoun (RP)/gap selections for each island and task type

Views on resumptive pronouns

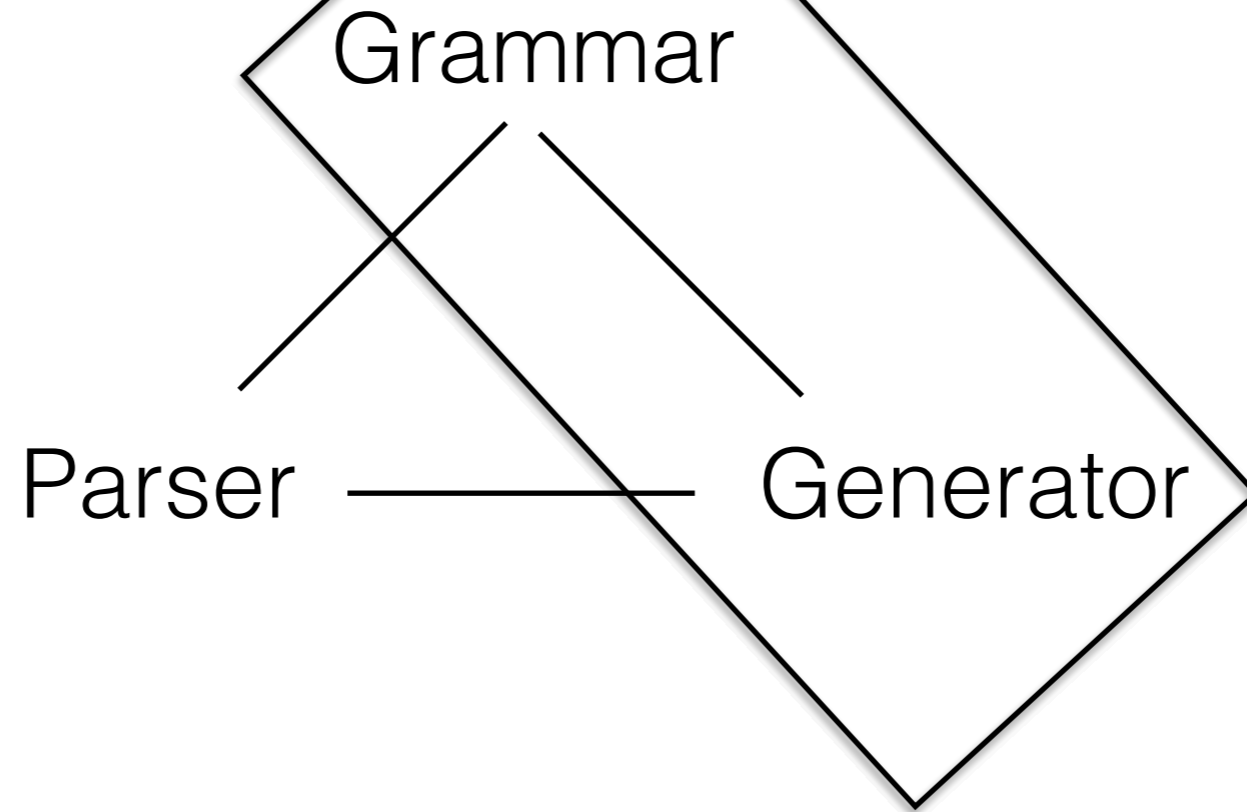
Resumptive pronouns are “intrusive” and not grammatically licit? -> Potential misalignment between grammar and parser?

Resumptive pronouns are production-based strategies? -> Potential misalignment between parser and generator?

But, when resumptive pronouns affect both comprehension and production, so maybe there's no serious misalignment?

The difference may reduce to *tasks, not mechanisms?*

Parser-generator relation



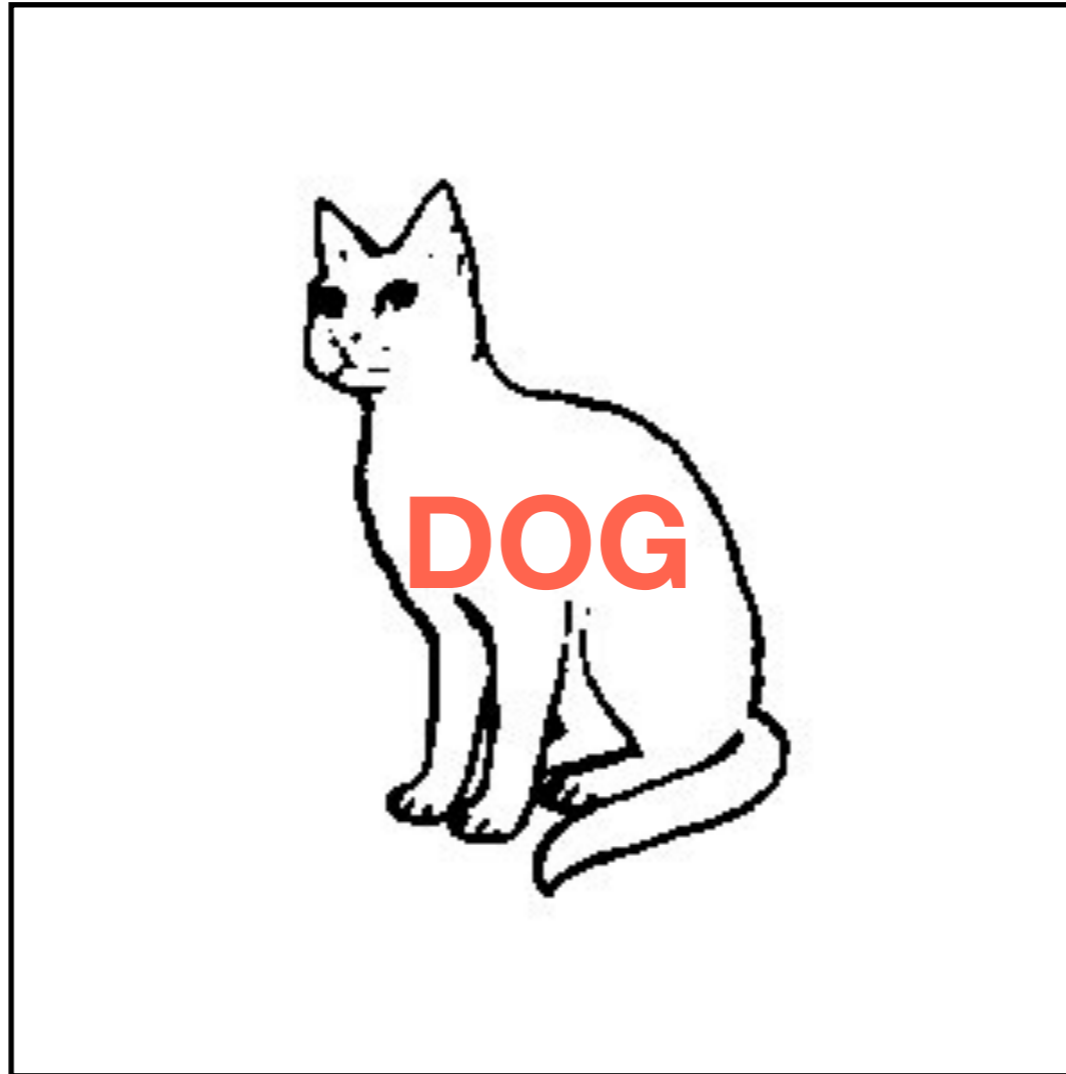
- Speech error?
- Do fined-grained representational features of structures really affect production?

A case study: timing of verb planning

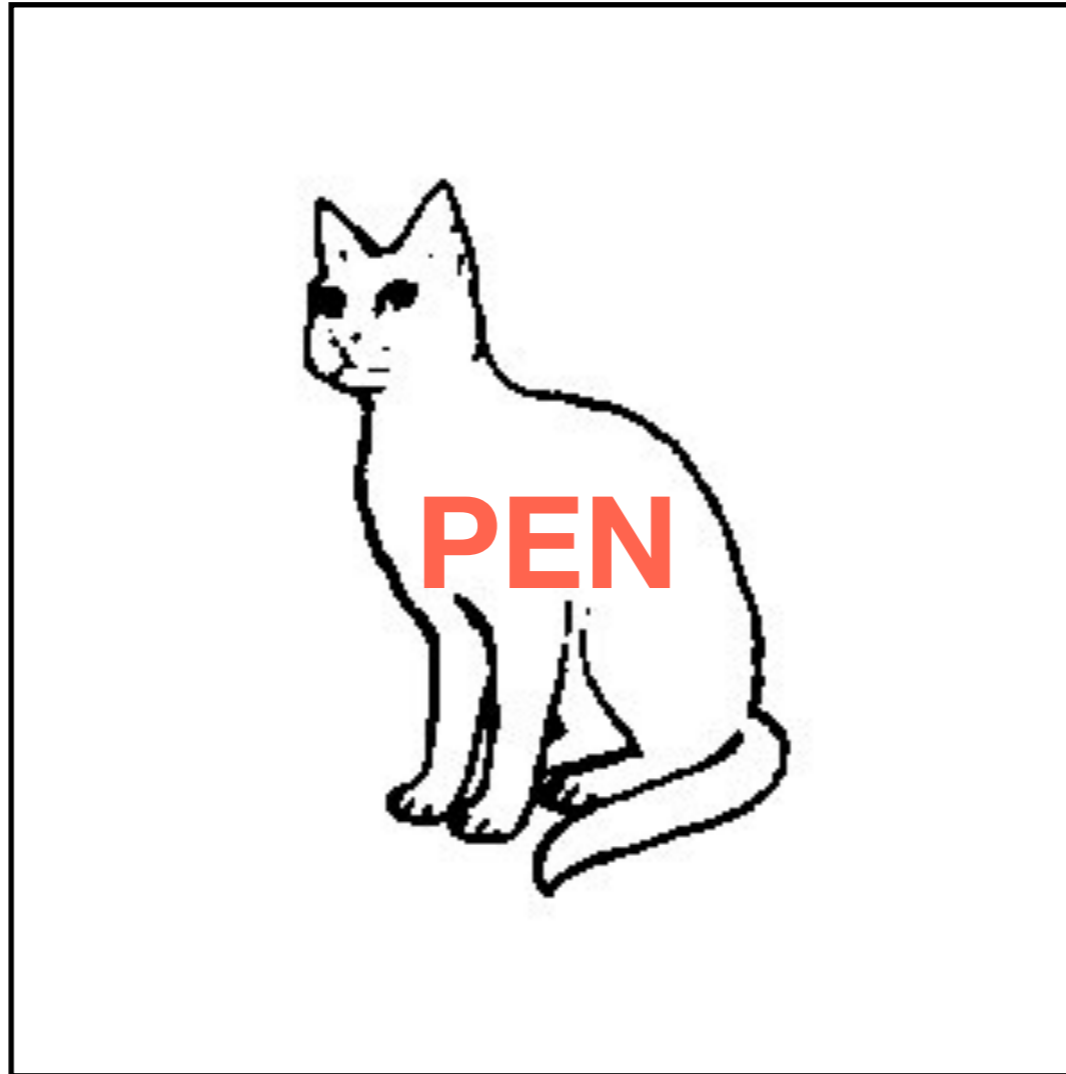
- When do speakers plan verbs in various types of sentences?

But how do we study the timing of verb planning?

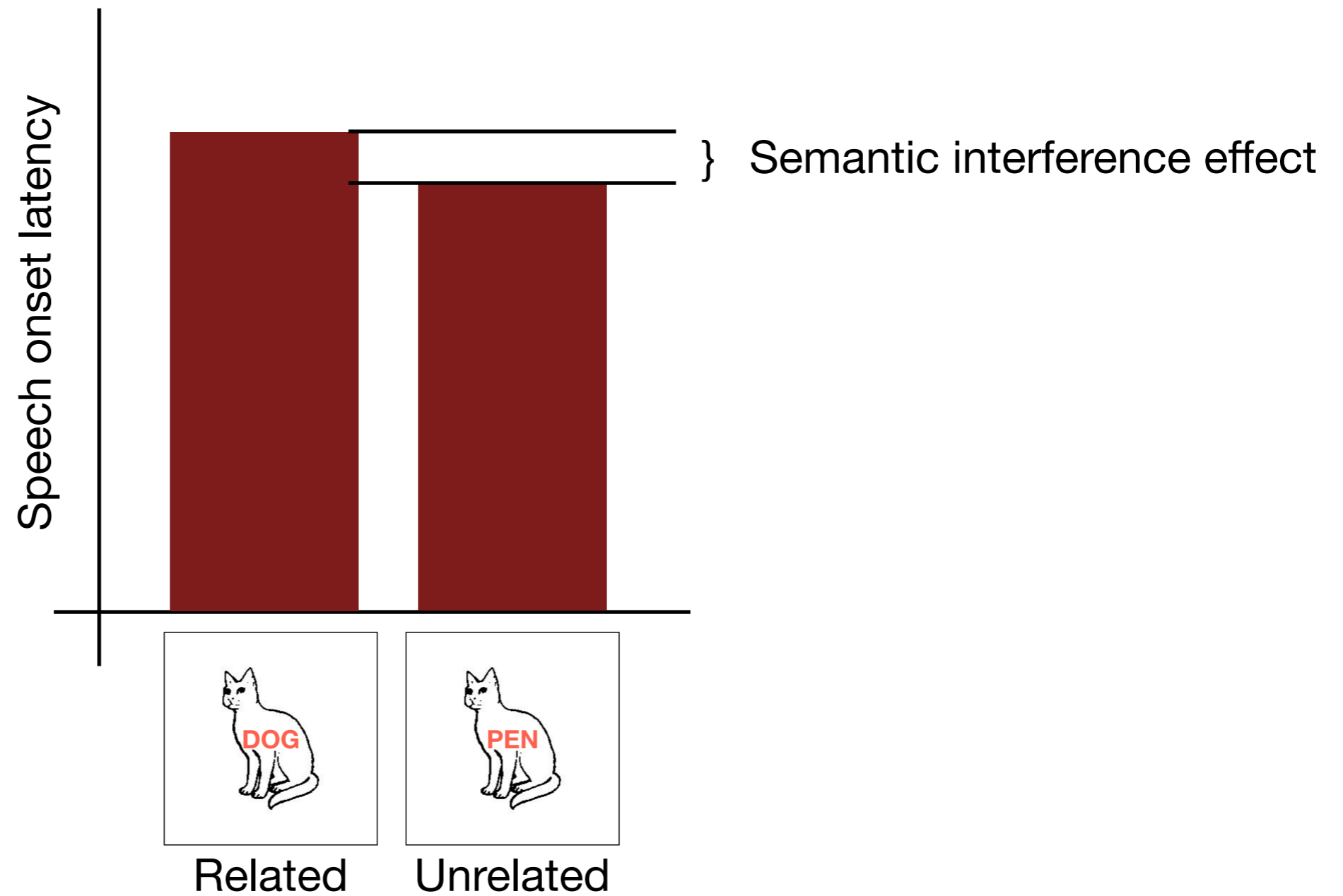
Picture Word Interference



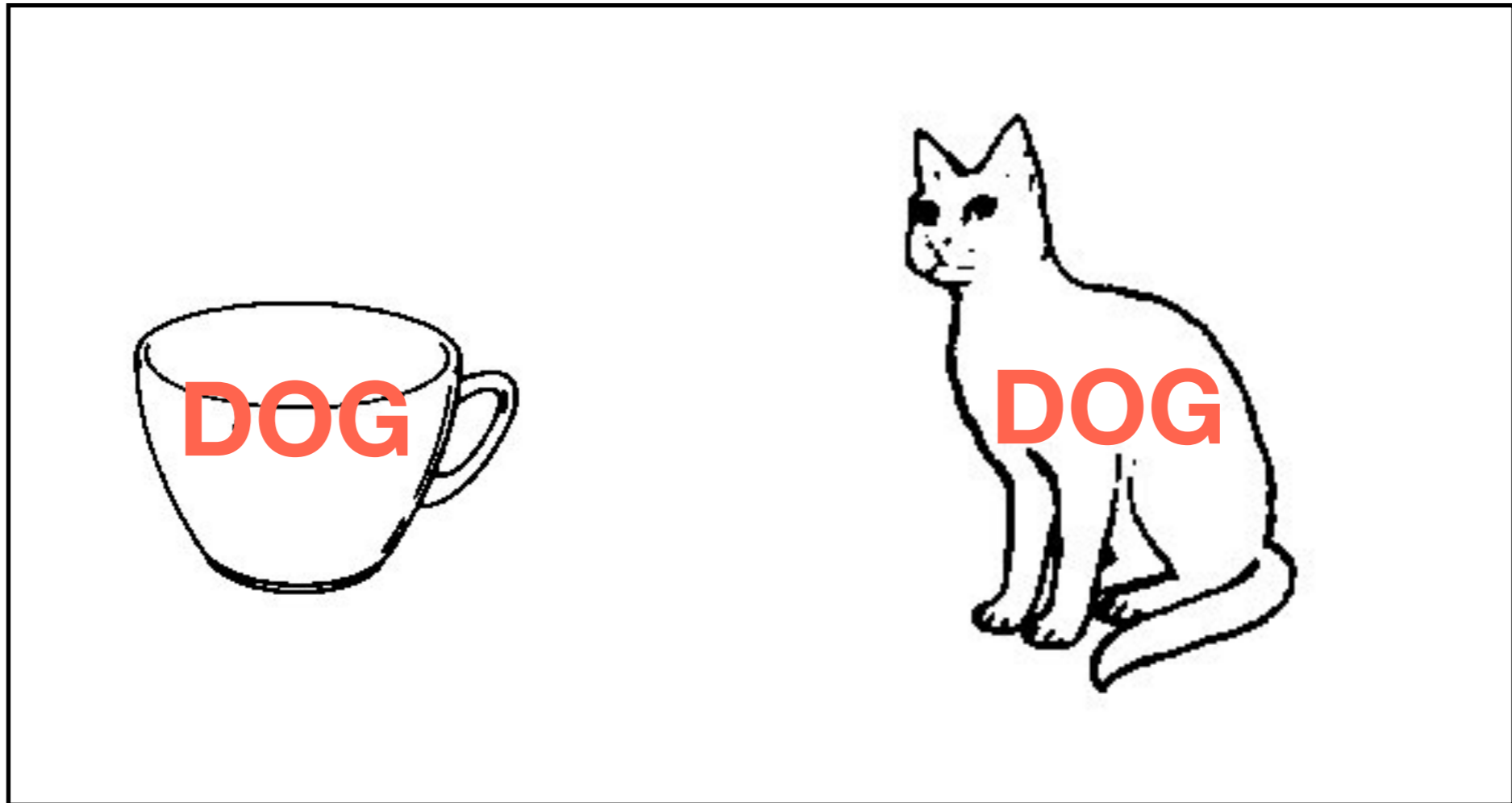
Picture Word Interference



Picture Word Interference

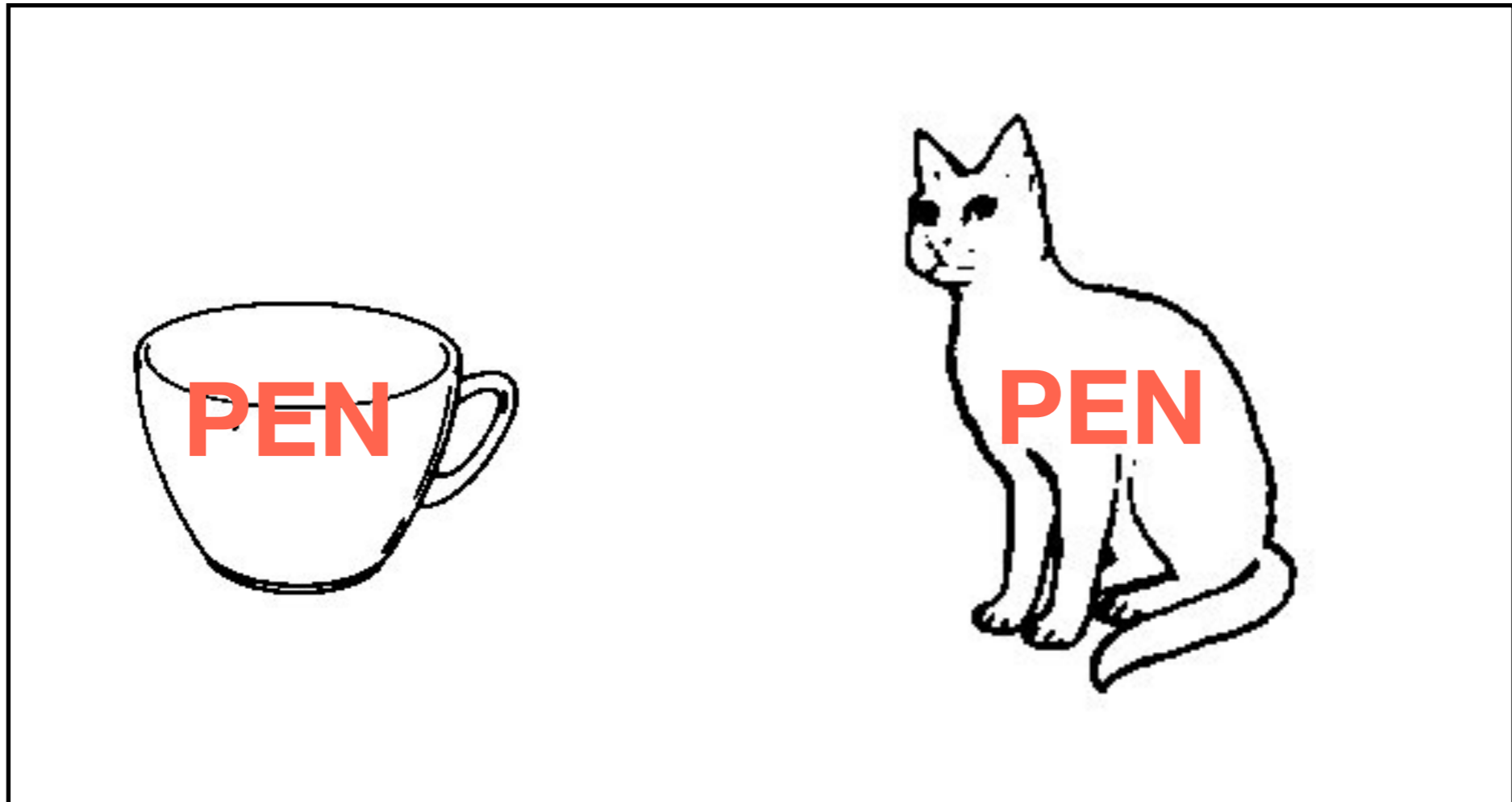


Extended Picture Word Interference



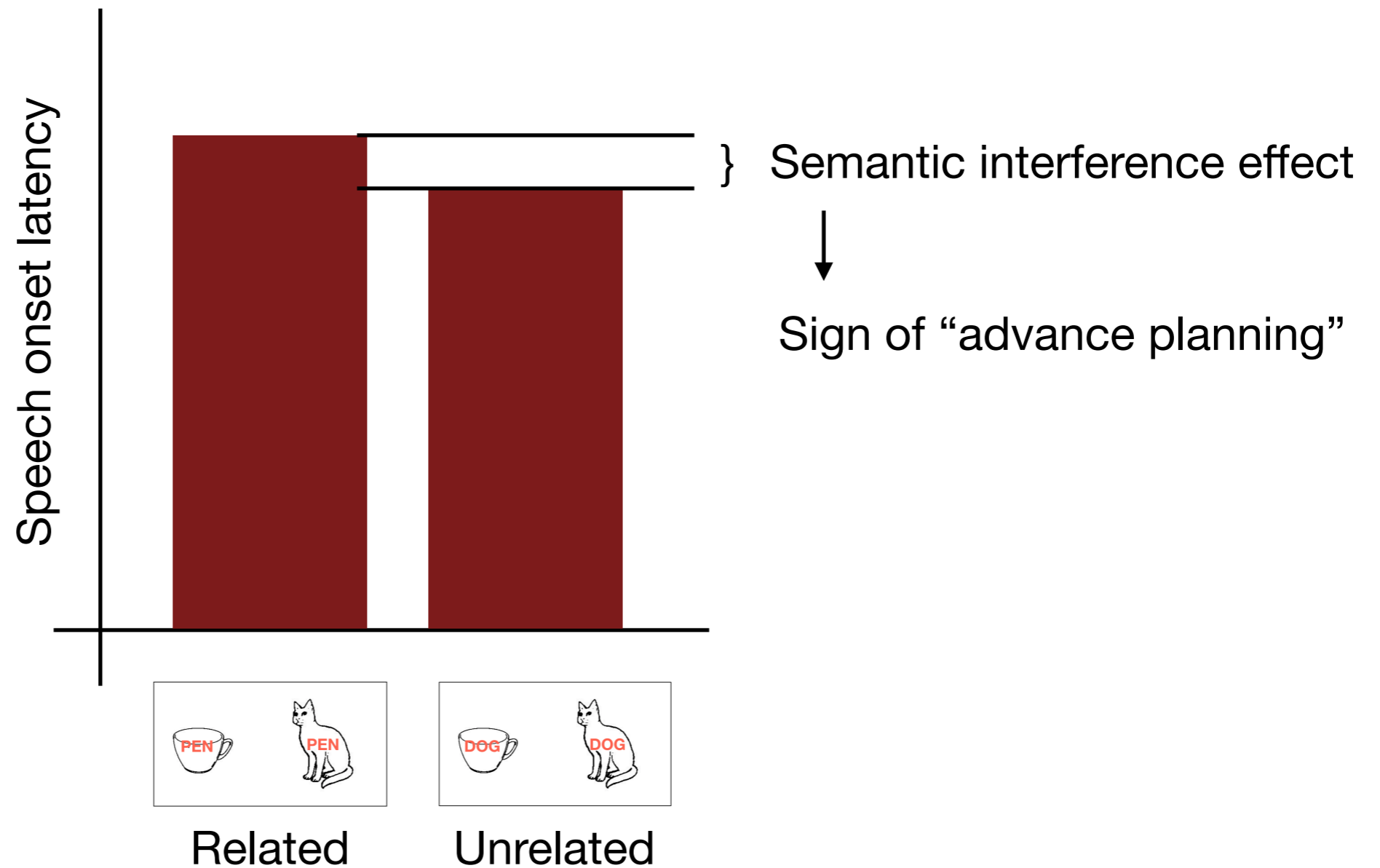
The cup is next to the **cat**.

Extended Picture Word Interference



The cup is next to the **cat**.

Extended Picture Word Interference



The cup is next to the cat.

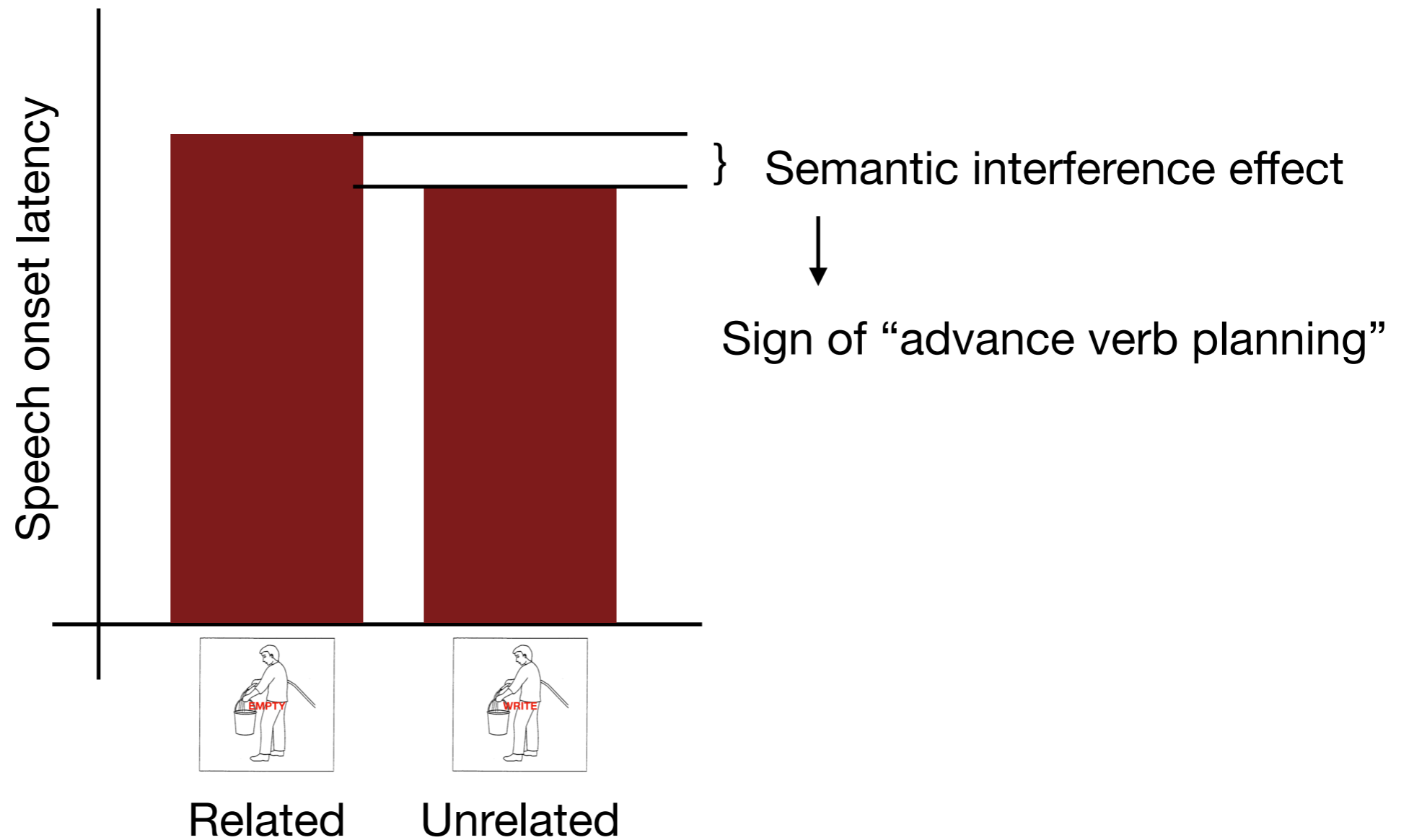
Extended Picture Word Interference



Extended Picture Word Interference



Extended Picture Word Interference



Previous studies

Verb planning before the articulation of...

- The **object** in active transitive sentences (in Japanese)
- The **subject of passive** sentences (but not actives)
- The **subject of unaccusative sentences** (but not unergative sentences)

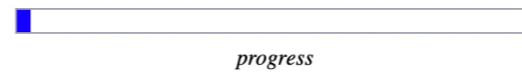
Descriptive generalization:

- Verbs are planned selectively before the articulation of “patient/theme”-like constituent?

THE PROBLEM OF FREE- WILL

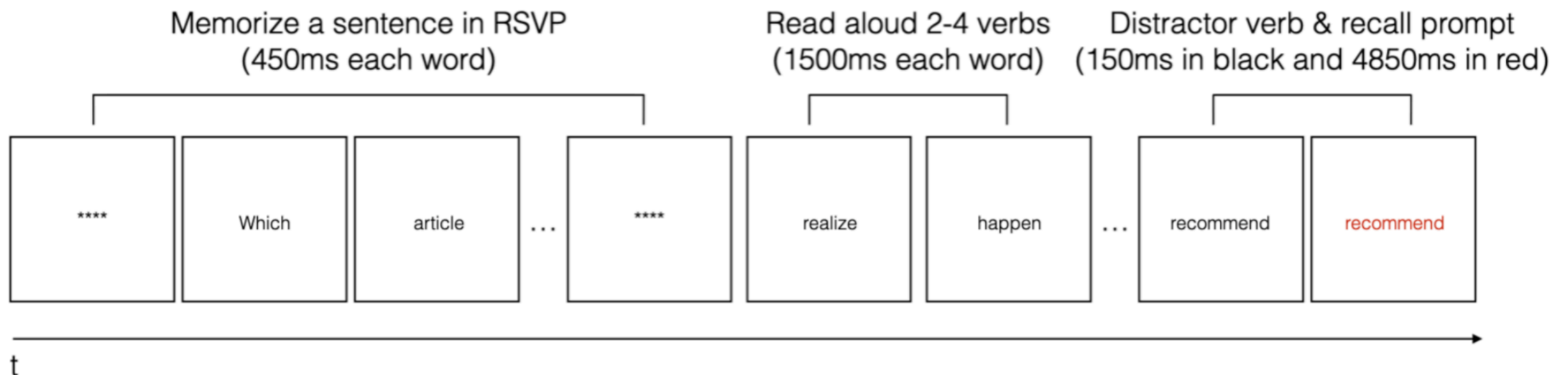


Sentence-Word interference task



Regeneration hypothesis (Potter & Lombardi, 1990):

When people recall a sentence, they are *regenerating* the sentence from conceptual memory + activated set of words.

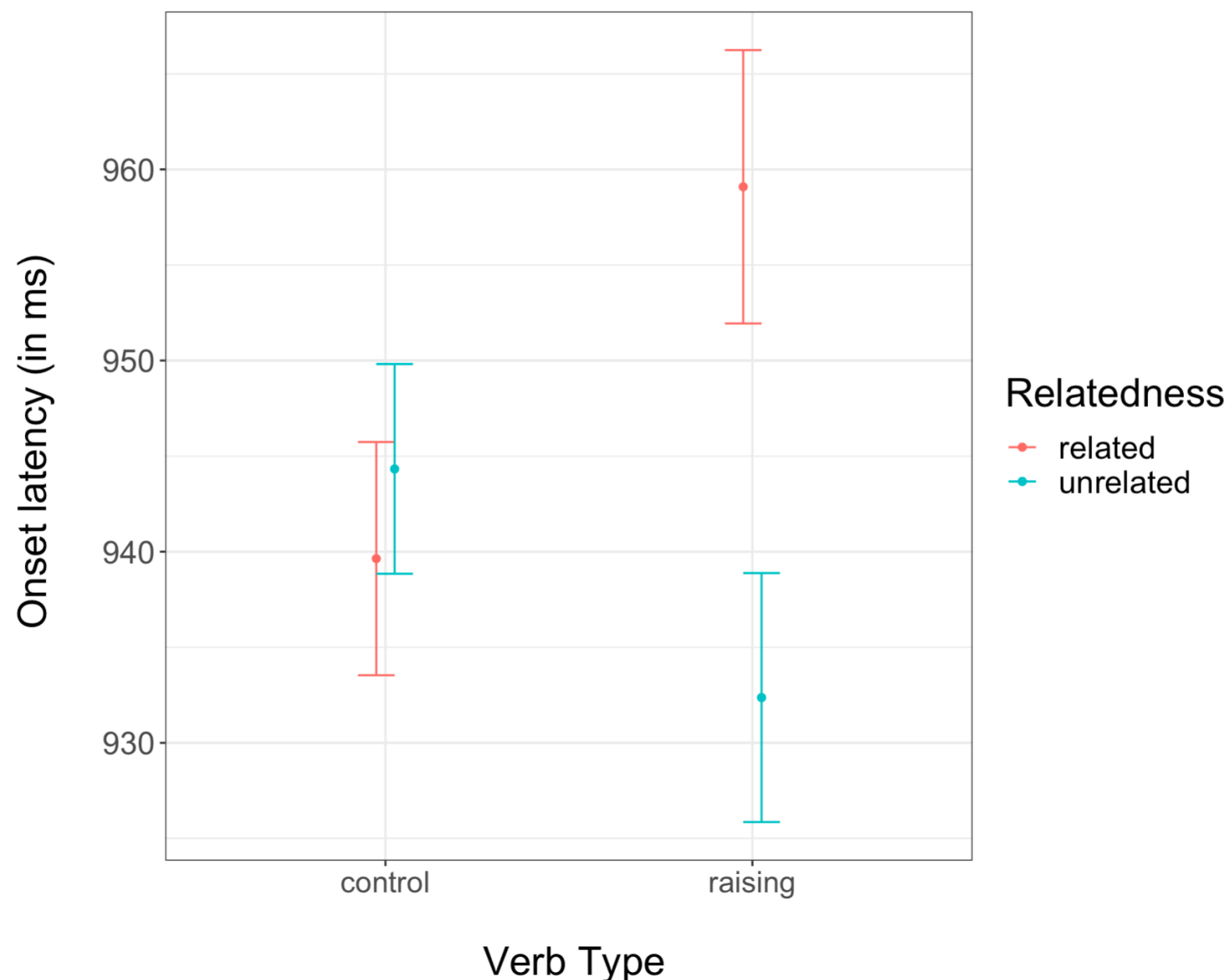


Control vs. raising

Control: The baby wanted PRO to be held t.

Raising: The baby appeared t to be held t.

Related:
Carry

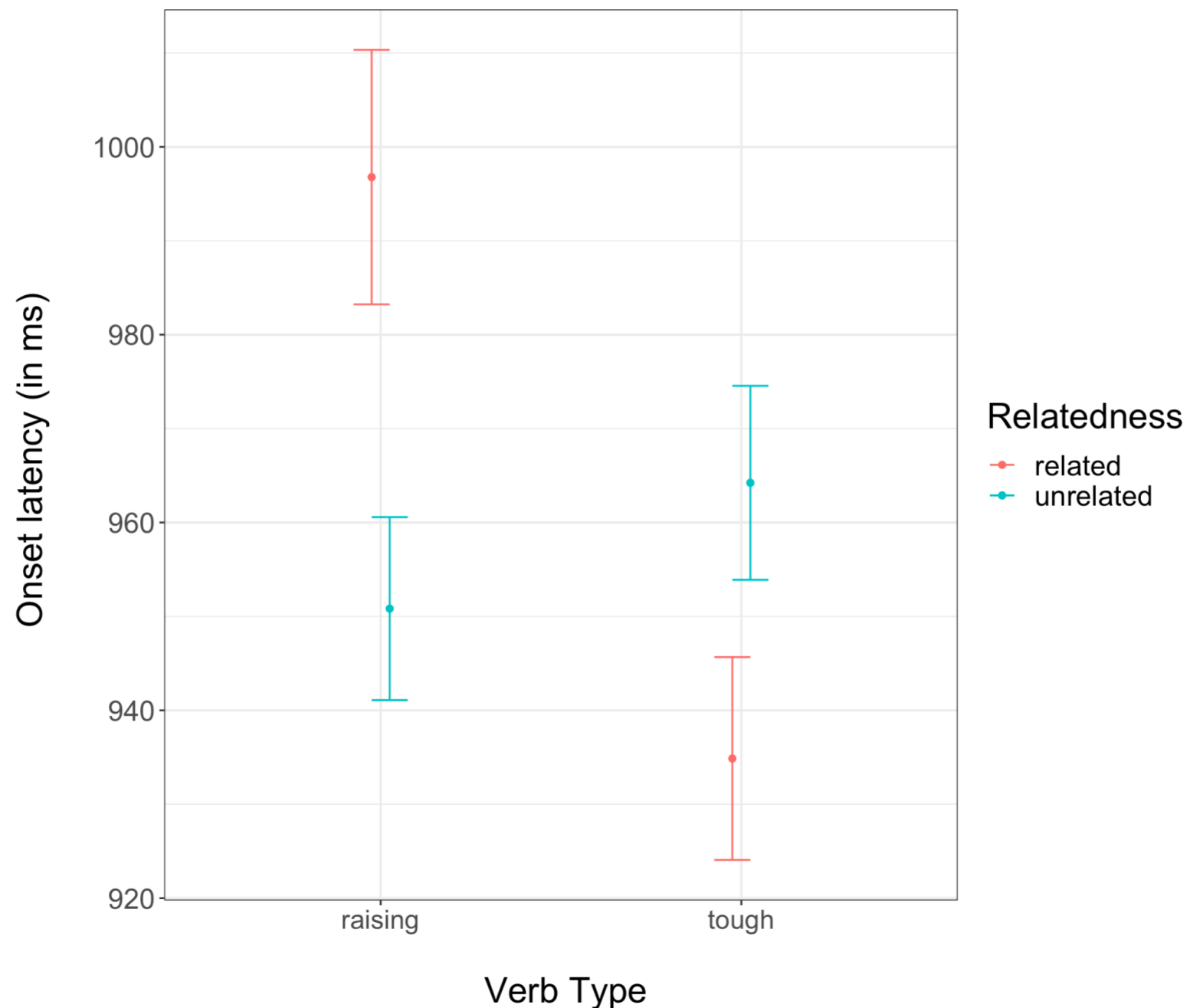


Raising vs. tough

Raising: The baby appeared t to be held t.

Tough: The baby was pleasant Op to hold t.

Related:
Carry



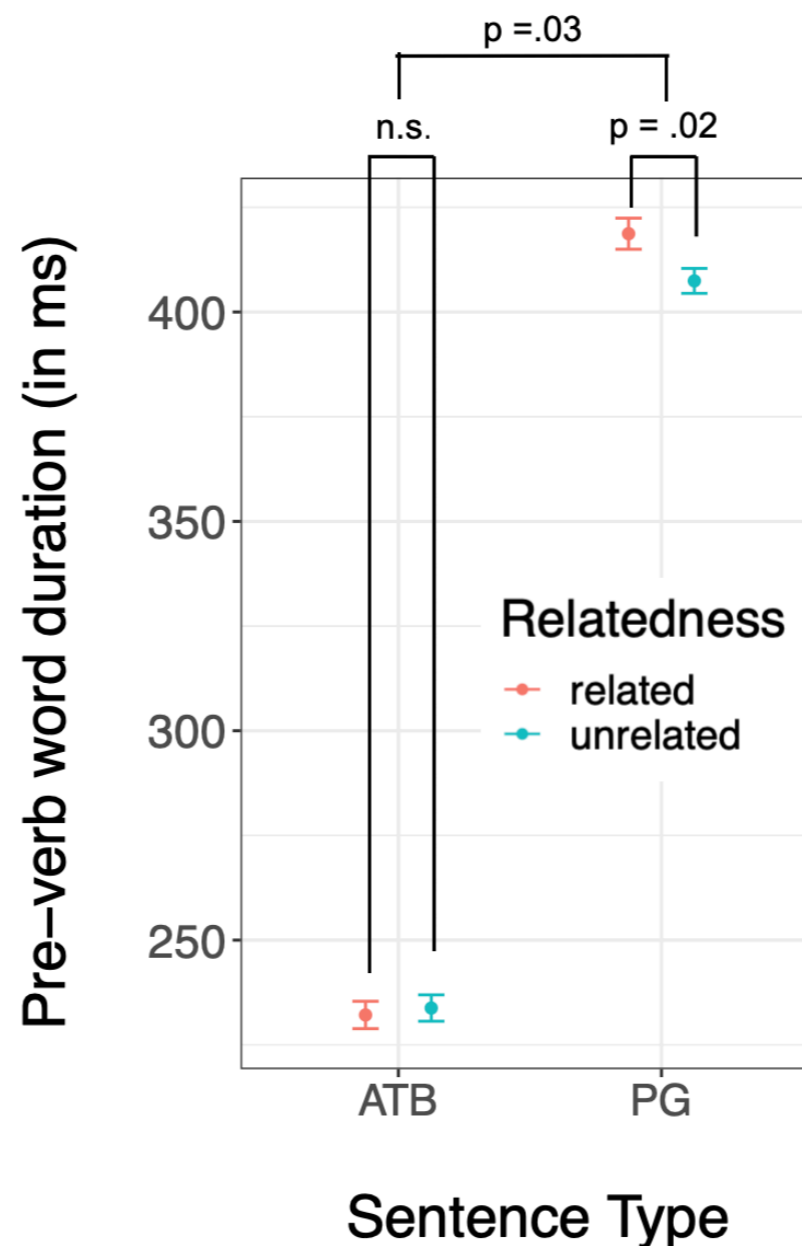
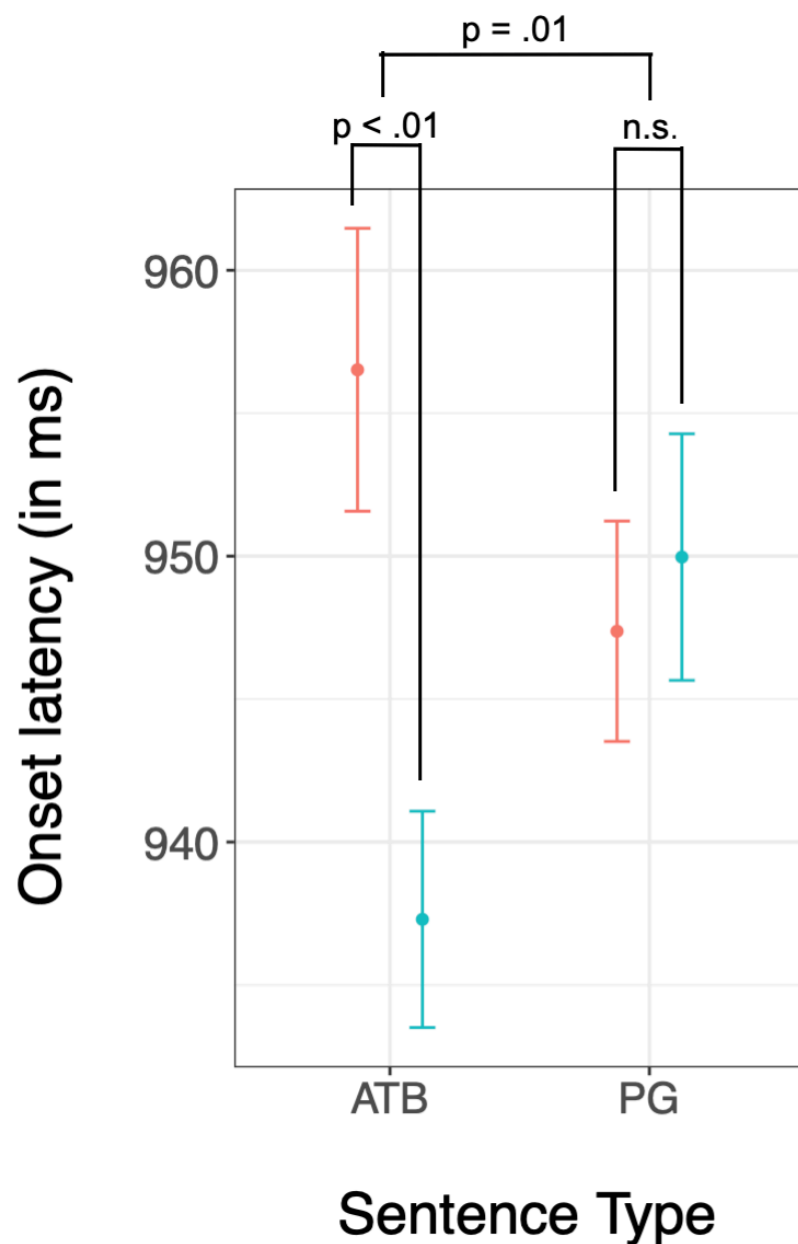
ATB vs. PG

ATB: Which book did you read t and criticize t?

Related: recommend

PG: Which book did you read before Op criticizing t?

N = 160



Masaya Yoshida
(Northwestern U)

Generalization

- Verb planning before the articulation of...
 - The **object** in active transitive sentences (in Japanese)
 - The **subject of passive** sentences (but not actives)
 - The **subject of unaccusative sentences** (but not unergative sentences)
- The **matrix subject of raising sentences with embedded passives** (but not of control or tough sentences).
 - The **object of the second verb in ATB** (but not PG)

Generalization:

~~Verbs are planned selectively before the articulation of “patient/theme”?~~

Verbs are planned selectively before the articulation of verbs’
syntactic complements (internal arguments).

Generalization

- Verb planning before the articulation of...
 - The **object** in active transitive sentences (in Japanese)
 - The **subject of passive** sentences (but not actives)
 - The **subject of unaccusative sentences** (but not unergative sentences)
- The **matrix subject of raising sentences with embedded passives** (but not of control or tough sentences).
 - The **object of the second verb in ATB** (but not PG)

Representational theories constructed based on acceptability judgement are extremely useful in making predictions about when speakers plan verbs.

Grammar, Parser & Generator relations

