

## The Puzzle of Subject Islands

Are there different types of subject islands?

- Hiramatsu (1999) shows that subject islands undergo satiation. However, she only looked at extraction out of unaccusative subjects.
- Are some subjects more permeable than others: subjects of unaccusatives vs. subjects of unergatives vs. subjects of transitives?

What is it that makes extraction out of a subject difficult? Three possibilities are:

- Base position of the argument (external vs. internal) (Merchant 2001)
- Topicality of the argument (topics = islands) (Gundel 1974, Erteschik-Shir 2007)
- Complexity of argument structure (number of arguments)

In the following studies, we test these possibilities, using English and Russian data.

## Subject Island Extraction in English

English allows us to manipulate the number of arguments, and the base position of the subject (internal or external argument).

Design:

- 3x2 design
  - Ungrammatical items and grammatical controls
  - Verb conditions: unaccusative, transitive, and unergative
- Self-paced reading task (n=35) and 1-5 rating task (n=37); 36 items

Example stimuli:

- Extraction
  - Janet wonders what the conference on \_\_\_ lasted for a week (unaccusative)
  - Janet wonders what the conference on \_\_\_ succeeded for a week (unergative)
  - Janet wonders what the conference on \_\_\_ ignored the proposals for a week (transitive)
- Control (grammatical)
  - Janet wonders what kind of conference lasted for a week (unaccusative)
  - Janet wonders what kind of conference succeeded for a week (unergative)
  - Janet wonders what kind of conference ignored the proposals for a week (transitive)

## Subject Island Extraction in Russian

Russian allows us to vary more parameters: number of arguments, base position (internal/external argument), and word order (pre- and post-verbal subjects, which differ in topicality – Bailyn 2004, Sturgeon 2005).

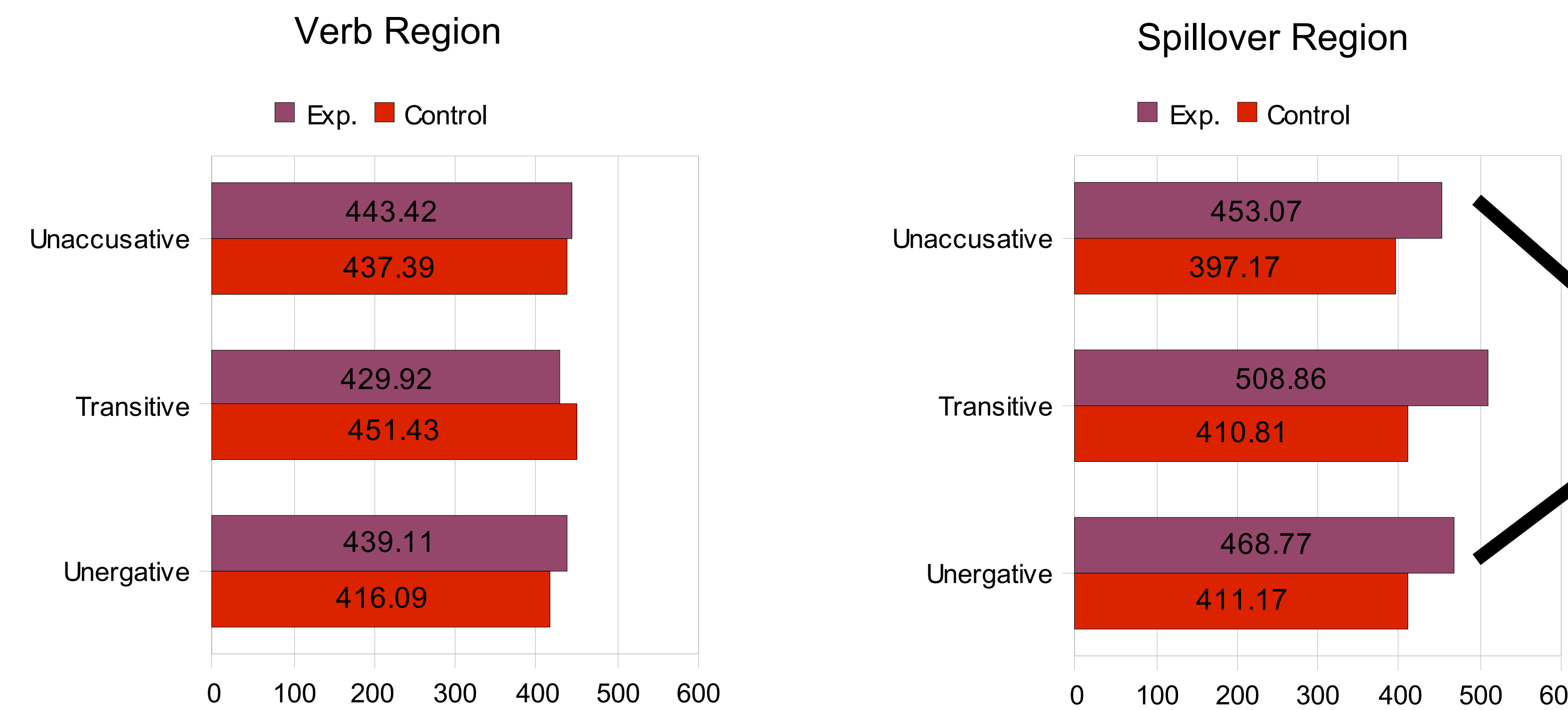
Design:

- 4x2 design
  - SV/VS word order
  - Verb conditions: passive, transitive, unaccusative, and unergative subject extraction
- Self-paced reading and acceptability rating task (n=16); 40 items

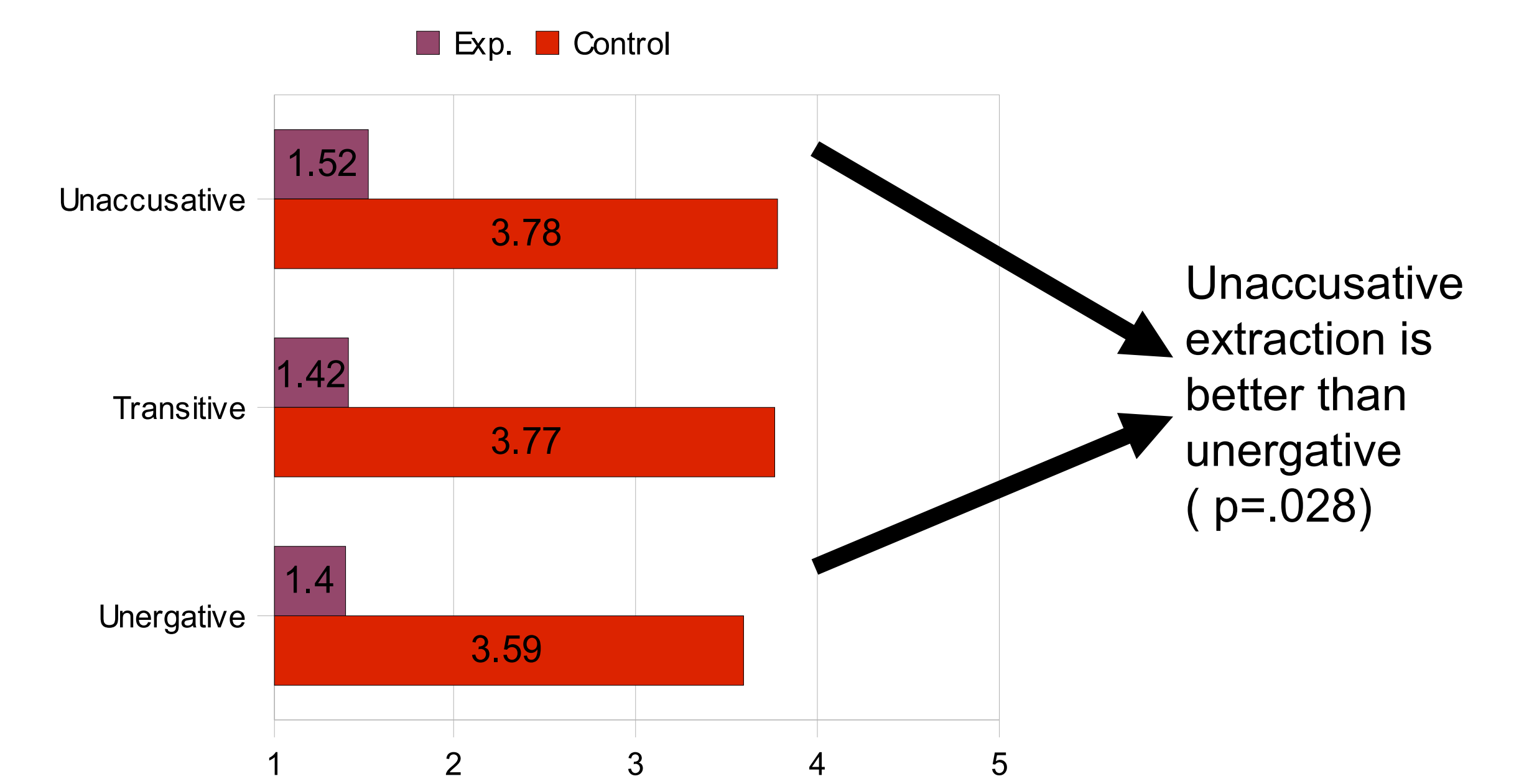
Example stimuli:

- Passive:
  - kakie on prosit, čtoby \_\_\_ komnaty byli ubrany s utra? (SV)  
what-kind.pl he is-asking, that \_\_\_ rooms were cleaned in morning?
  - kakie on prosit, čtoby s utra byli ubrany \_\_\_ komnaty? (VS)  
what-kind.pl he is-asking, that in morning were cleaned \_\_\_ rooms?  
“what kind of rooms is he asking to be cleaned in the morning?”
- Transitive:
  - kakie on prosit, čtoby \_\_\_ fonari osveshhali dorogu? (SV)  
what-kind.pl he is-asking, that \_\_\_ streetlights illuminated road?
  - kakie on prosit, čtoby dorogu osveshhali \_\_\_ fonari? (VS)  
what-kind.pl he is-asking, that road illuminated \_\_\_ streetlights?  
“what kind of streetlights is he asking (to be used) to illuminate the road?”
- Unaccusative:
  - kakie on prosit, čtoby \_\_\_ kolokola zvonili večerom? (SV)  
what-kind.pl he is-asking, that \_\_\_ bells rang in-evening?
  - kakie on prosit, čtoby večerom zvonili \_\_\_ kolokola? (VS)  
what-kind.pl he is-asking, that in-evening rang \_\_\_ bells?  
“what kind of bells is he asking to ring (be rung) in the evening?”
- Unergative:
  - kakie ona prosit, čtoby \_\_\_ vrači dezhurili zavtra? (SV)  
what-kind.pl she is-asking, that \_\_\_ doctors be-on-call tomorrow?
  - kakie ona prosit, čtoby zavtra dezhurili \_\_\_ vrači? (VS)  
what-kind.pl she is-asking, that tomorrow be-on-call \_\_\_ doctors?  
“what kind of doctors is she asking to be on call tomorrow?”

## English Reading Times (msec)

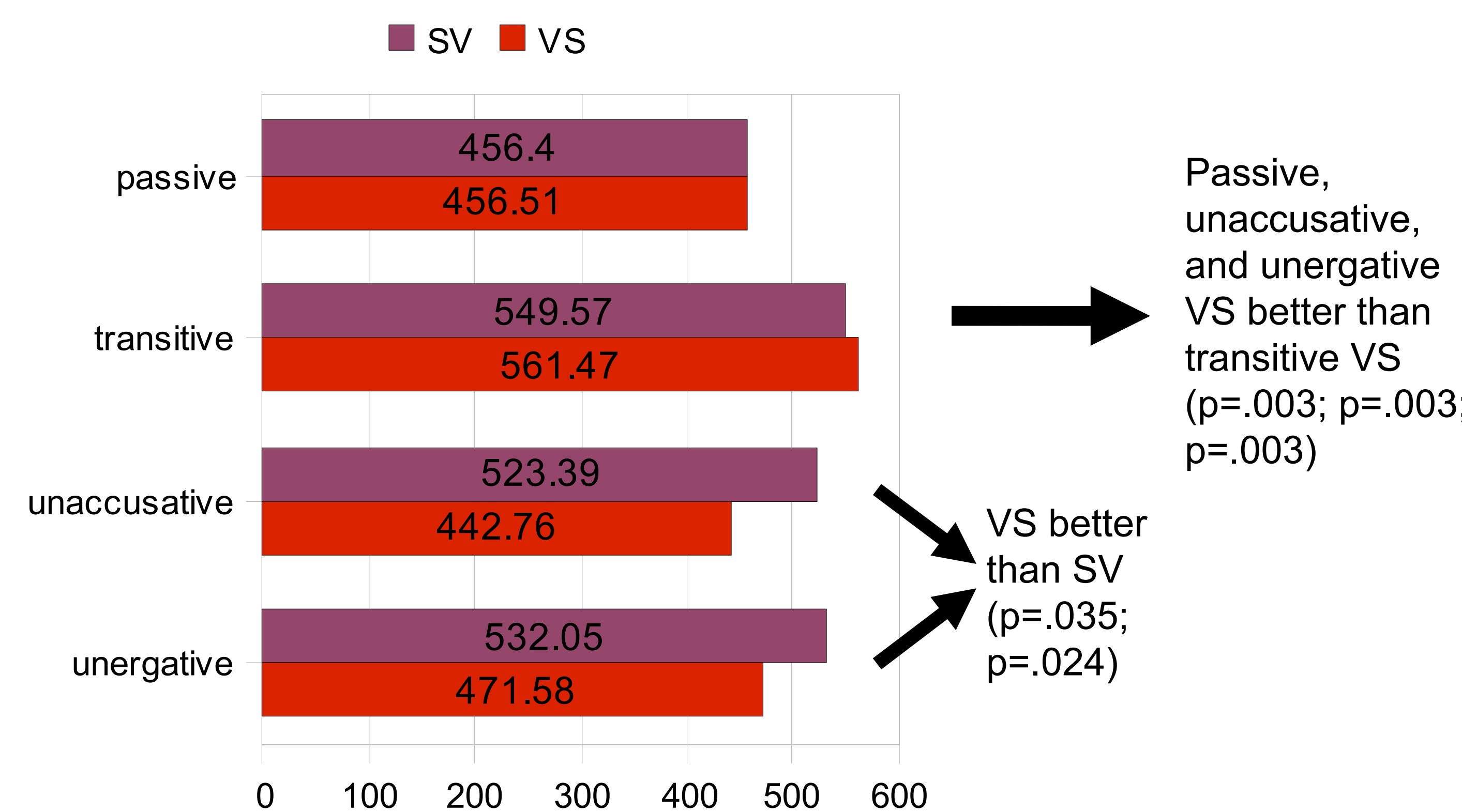


## English Judgment Task (1-5)

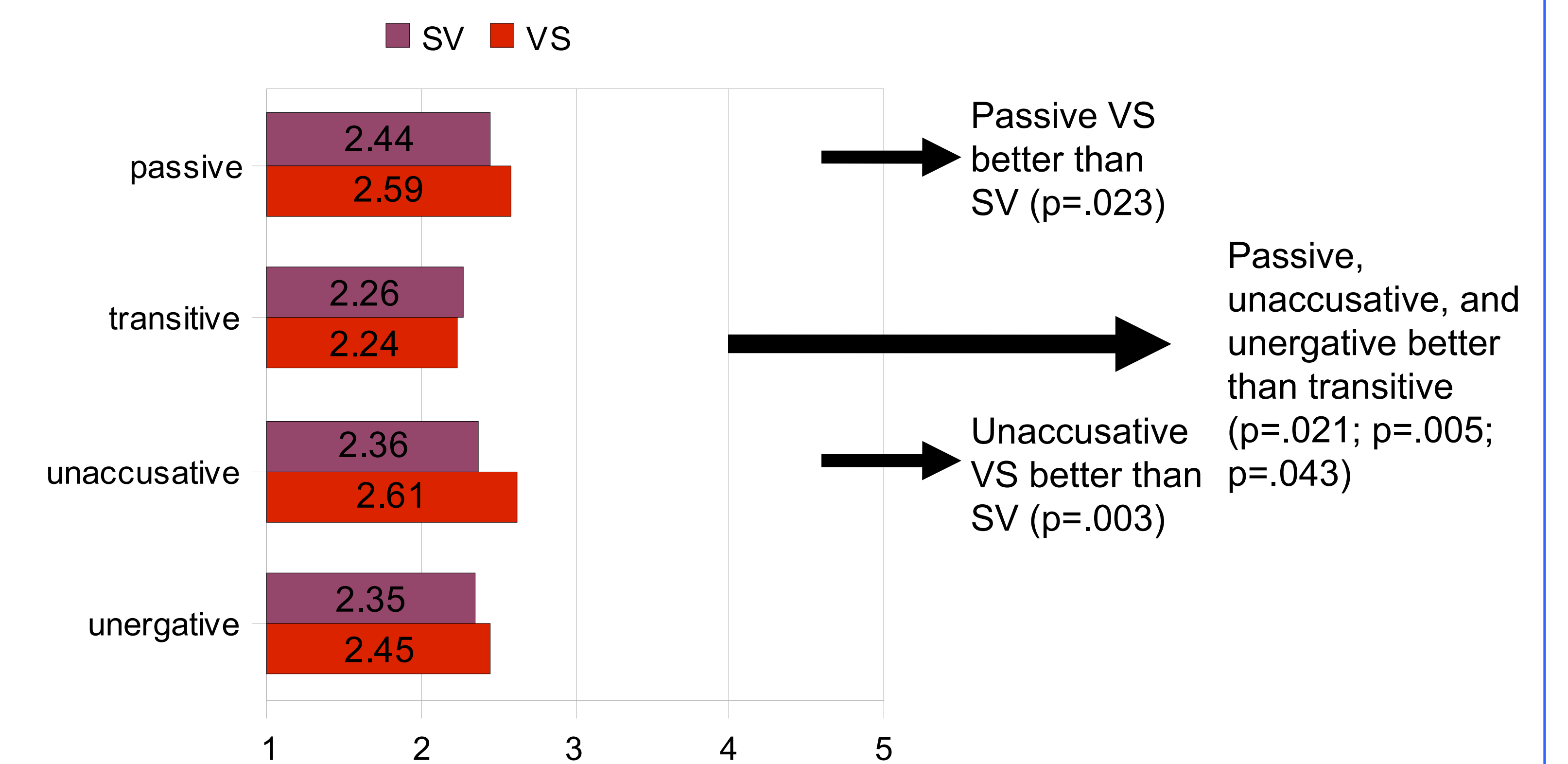


- Unaccusative advantage:** the unaccusative extraction is easier than the unergative (the transitive condition cannot be directly compared to other conditions in the spillover region of the reading task, due to the object vs. preposition contrast)
- Two possible explanations:
  - Base position: the base position of the subject argument has more effect on its permeability than the derived position.
  - Topicality: unaccusative subjects are commonly interpreted as non-topics (Kuroda 1972, Kiss 1995, Kluender 2004). Extraction out of topics may be more difficult.

## Russian Reading Times (msec)



## Russian Judgment Task (1-5)



- No evidence of the unaccusative advantage seen in the English experiments.
- Word order matters: preverbal subjects are stronger islands, which suggests that topicality, rather than the base position, has a greater effect on subject islandhood.
- Complexity of argument structure: transitive islands are strong, regardless of word order.

## Conclusions

Are there different types of subject islands?

- Yes: unaccusative subjects in English, and postverbal intransitive subjects in Russian, are weaker islands.
- Transitive subjects are invariably strong islands.

What makes extraction out of a subject difficult?

- Topicality:
  - The topicality of the subject appears to be the most important factor, but only for intransitive subjects.
  - Further support for this conclusion comes from Japanese and Korean, where topic-marked DPs (DP-*wa*, DP-*nun*) cannot host a non-contrastive *wh*-word.
- Argument complexity: transitivity may impose an additional processing cost.

## References

- Gundel, J. 1974. The role of topic and comment in linguistic theory. Ph.D. Diss. University of Texas at Austin.  
 Erteschik-Shir, N. 2007. Information structure: The syntax-discourse interface. Oxford.  
 Kiss, K. 1995. Introduction. In K. Kiss, ed. Discourse-configurational languages. Oxford.  
 Kuroda, S.-Y. 1972. The categorial and the thematic judgment. *Foundations of Language* 9: 153-185.  
 Kluender, R. 2004. Are Subject Islands Subject to a Processing Account? *WCCFL* 23: 475-499.  
 Merchant, J. 2001. The syntax of silence. Oxford.

## Acknowledgements:

- English: Tammy Beram, Tom Devine, Robbie Guastella
- Russian: John Bailyn, Vera Gribanova, Elena Muravenko, Yakov Testeleto, Alex Yanovsky