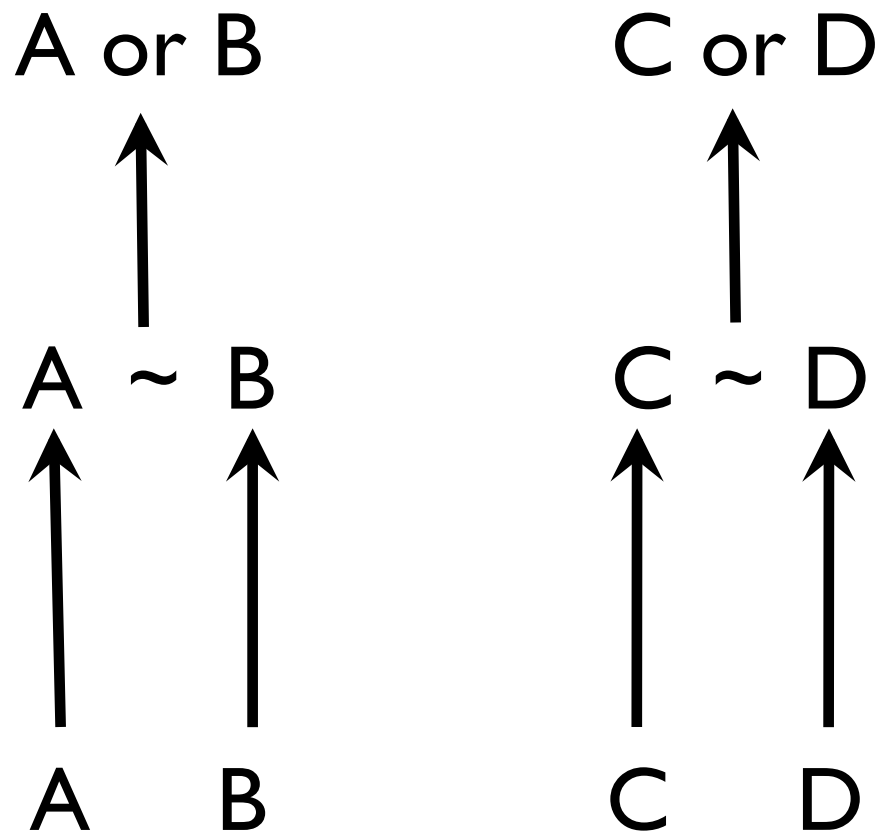


variation won't give up the ghost: the verb-particle 'alternation' in and out of grammar

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- Georgetown University, 6 December 2013
 - http://www.danielezrajohnson.com/johnson_gtown.pdf
- Work in collaboration with: Bill Haddican (CUNY-QC)

what is an 'alternation'?

- what affects the variation, and where? ('locus')



- in English: particle verb, dative, genitive, others

the particle verb 'alternation'

- Jen threw the wrapper away (VOP)
- Jen threw away the wrapper (VPO)
- Jen kept (on) her shirt (on). VOP can be idiom
- Jen threw (away) the key (away). VPO can be idiom
- Jen gave (up) the ghost (up). VPO idiom, VPO semi
- Jen closed (up) shop (*up). VPO idiom, VOP bad
- Jen put (on) the kettle (on). UK vs. USA, discourse
- Does VP entail V? Does VP entail P? (Hawkins)
- meaning: no referential difference (Lavandera)

the neighborhood

1) Jen rolled (in) the beer keg (in).

2a) Jen rolled (*in) the beer keg (in) the room.

2b) Jen rolled (?in the room) the beer keg (in the room).

- neighbors: not part of the alternation, but probably not irrelevant (idioms are another kind)
- info. structure: old/topic before new/focus
- with a pattern found generally across languages, don't want English-particle-verb-specific solution
- how to fit variation into theoretical architecture

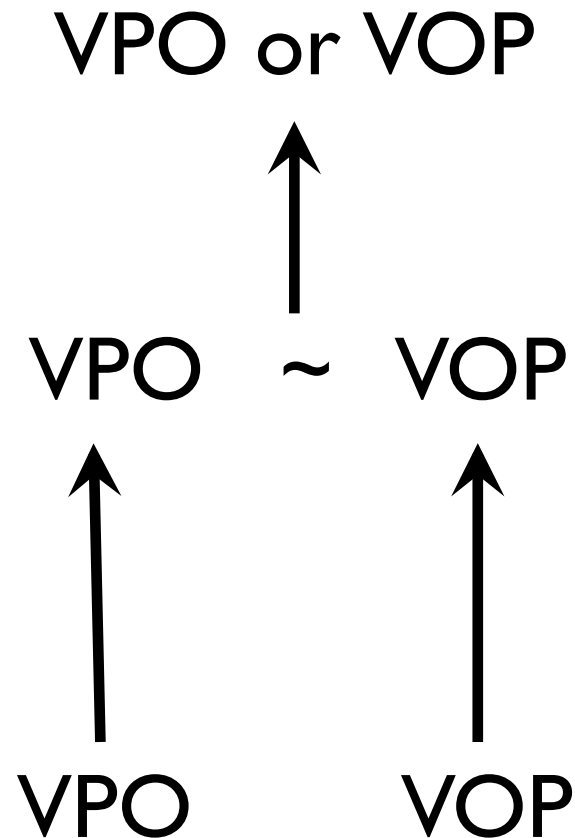
the theory

- syntax proper has no optional movement
- in lexicon, functional doublet(s) allow(s) options
- competing grammars type 1: should be unstable
- if this affects proportions, only the ‘base rate’ ?
- competing grammars type 2
 - processing factors affect proportions
 - lexical factors affect proportions
 - verb • particle • verb-particle pair • ambiguous pair
- is this architecture too complicated?
- even so, does it wrongly assume choice model?

effects and explanations

- previous research assumes “choice model”
 - research with texts, speech, etc. naturally does so
 - Bresnan experiments do too, considered ‘Labovian’
- most research relates to processing (‘late’)
 - weight of constituents (usually direct object)
 - oldness/newness of constituents in discourse
 - topic/focus status of constituents (all correlated)
- other research on lexical semantics (‘less late’?)
 - compositional favors VOP? favors V and P effects?
- Cappelle, Dehé, Gries, Szmrecsanyi, Wasow...

acceptability judgments and the particle verb alternation

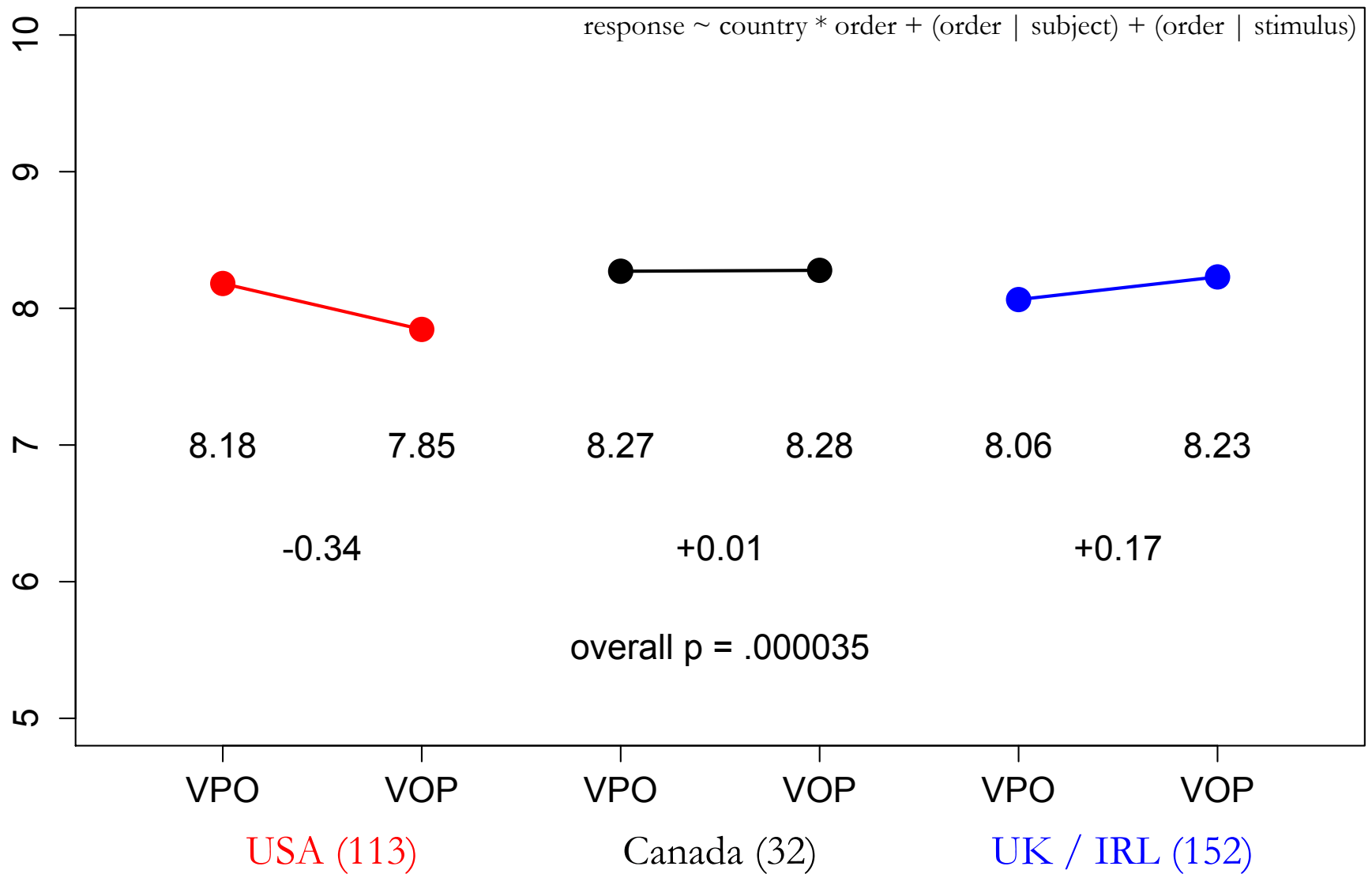


- if factor(s) affect(s) VPO and VOP differently...

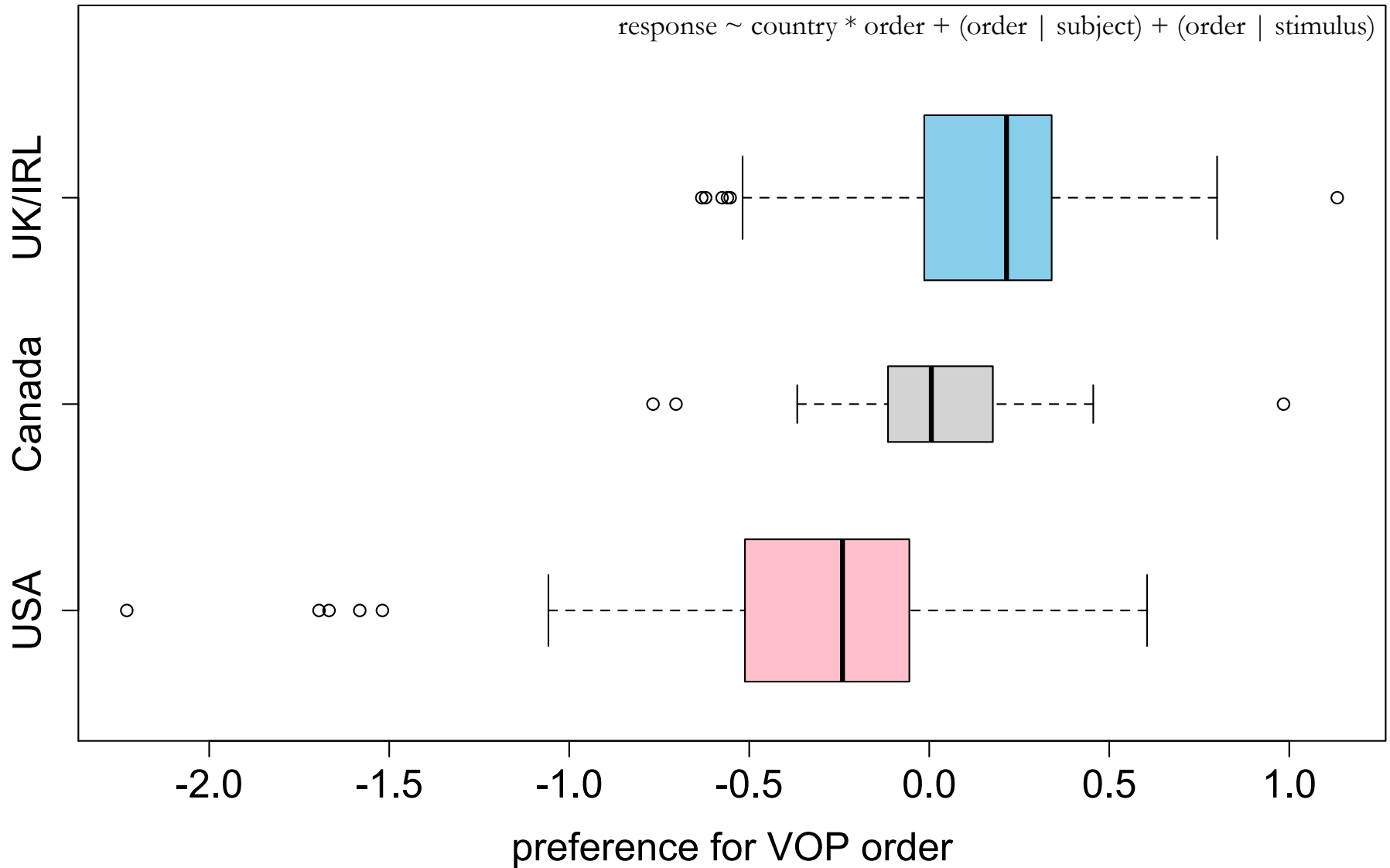
experiment I

- acceptability judgment experiments have drawbacks
- but allow us to look at VPO, VOP orders separately
- subjects judged sentences ‘bad’ (0) to ‘good’ (10)
- experiment 1: 297 subjects, US/Can./UK/Ireland
- object weight: ‘the (lumpy 10-pound) pumpkin’
- object oldness: via cataphoric pronoun
Because she had no money... *vs.* Because it tasted funny...
... Susan spit the conference dinner out.
- 32 stimuli, all compositional (Lohse et al. 2004)
- 32 fillers/normalizers – treated as fillers here

experiment I: country



experiment I: country

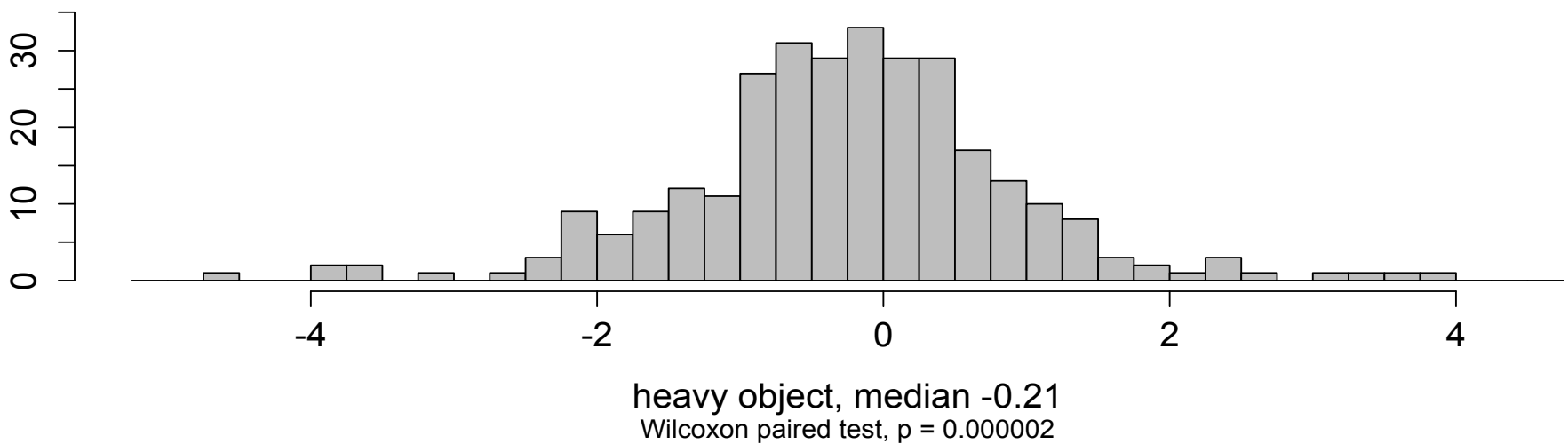
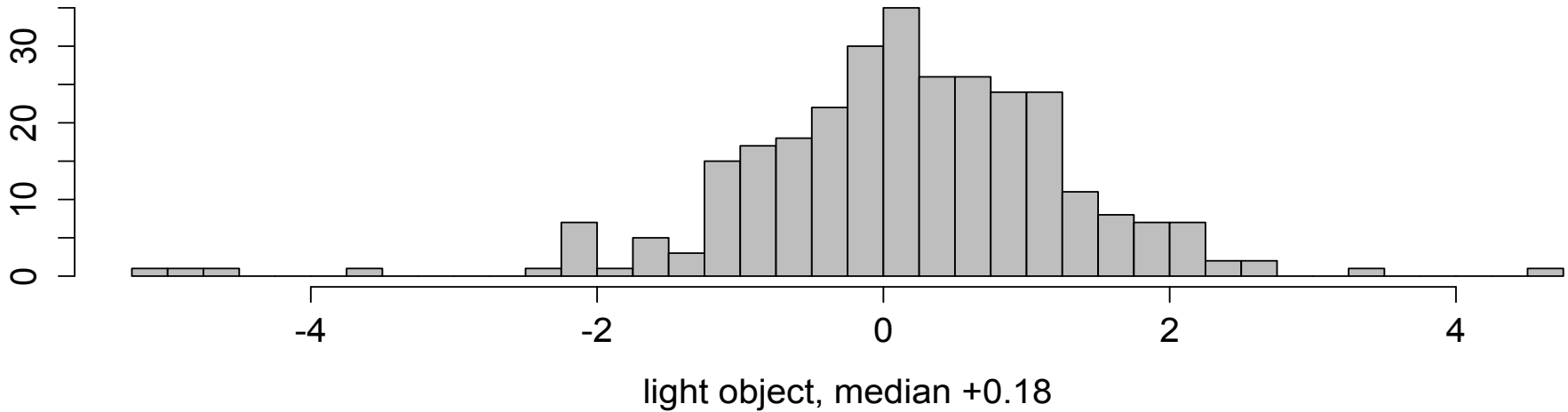


experiment 1: object weight

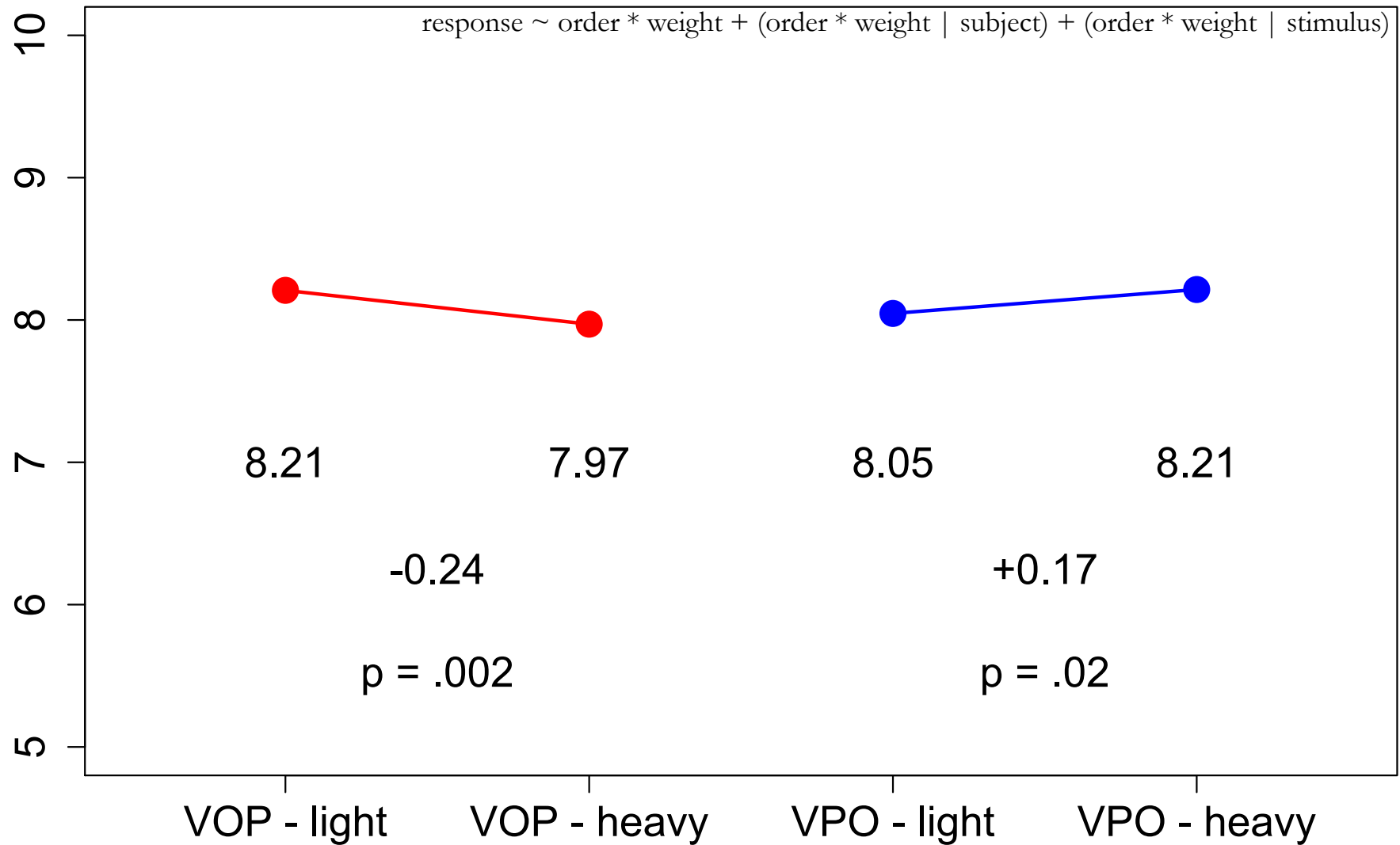
- 100 years of research from...
 - corpora that must treat VOP/VPO as a choice
 - experiments that treat VOP/VPO as a choice
- a heavy object should...
 - make VOP order worse
 - have no effect on VPO order (make slightly worse?)
- a discourse-old object should...
 - make VOP order better
 - make VPO order worse (probably both?)

experiment I: object weight

Preference for VOP order by subject

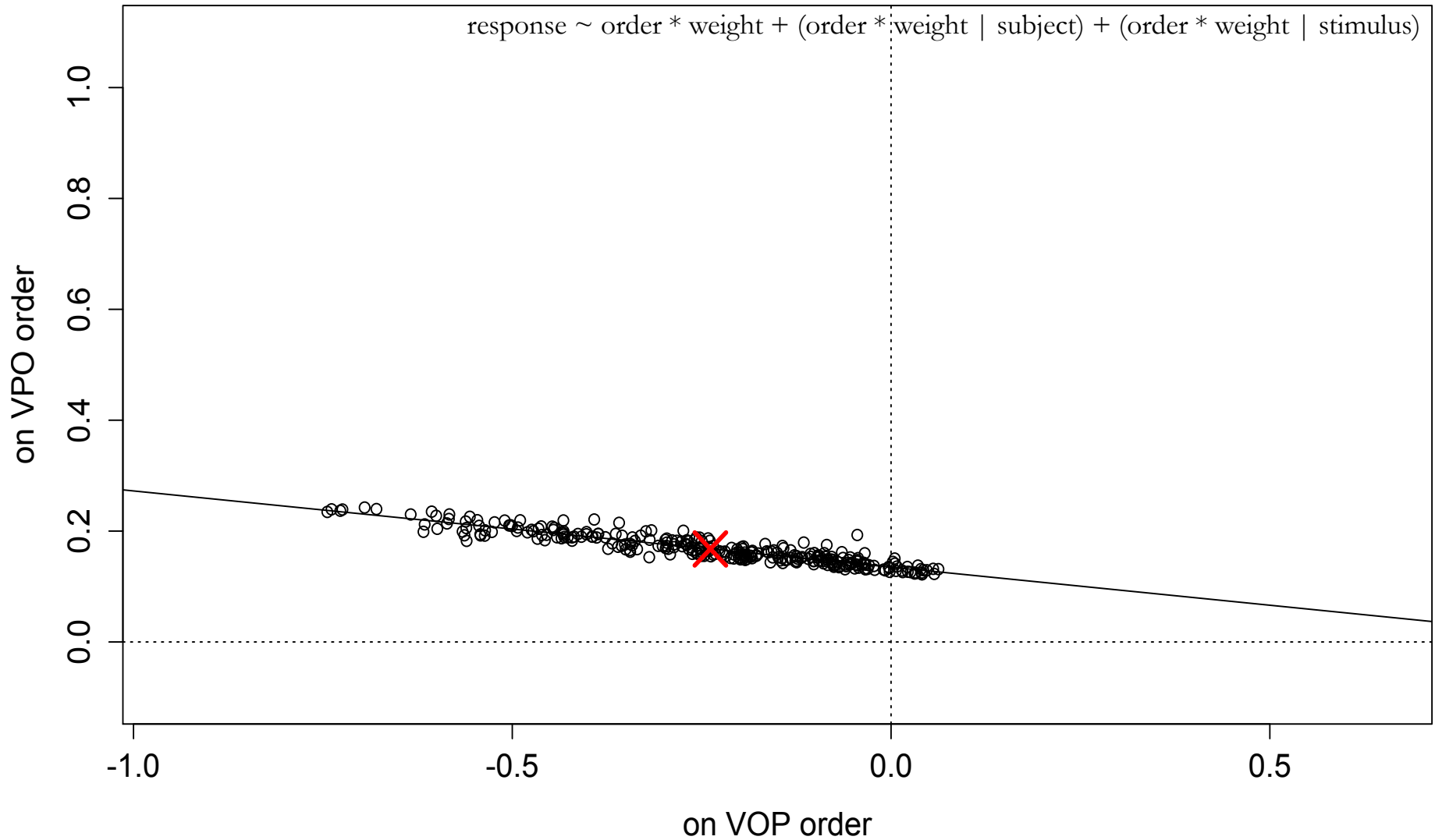


experiment I: object weight



experiment I: object weight

By-subject effect of heavy object



experiment 2

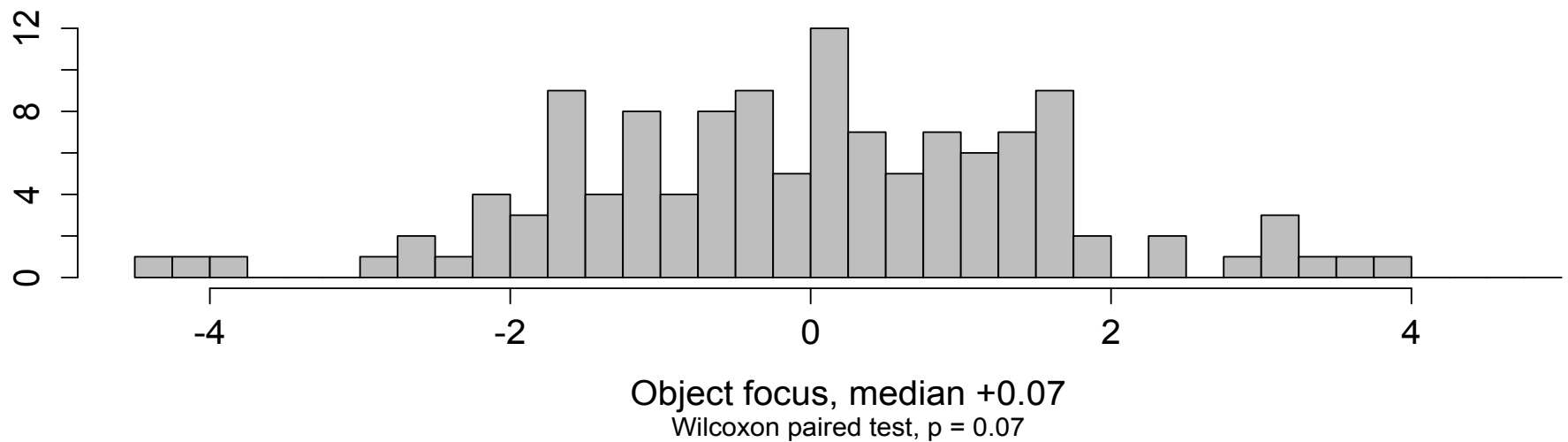
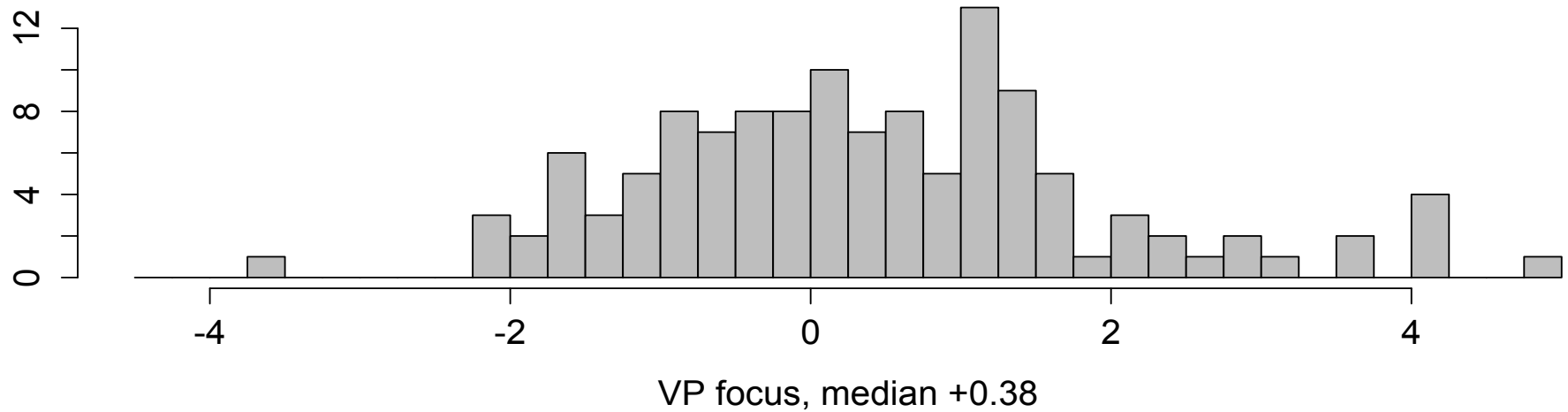
- experiment 2: 125 subjects from USA
- object length is now fixed
- four topic/focus conditions via question prompt
 - Q1. What did the friends do? (VP focus)
 - Q2. What did the friends pass around? (object focus)
 - Q3. What happened? (wide focus)
 - Q4. What happened to the beer? (object topic)
 - A1-4. The friends passed the beer around.
- worked much better than the cataphoric pronoun
- again, able to observe VPO and VOP separately

experiment 2: object focus

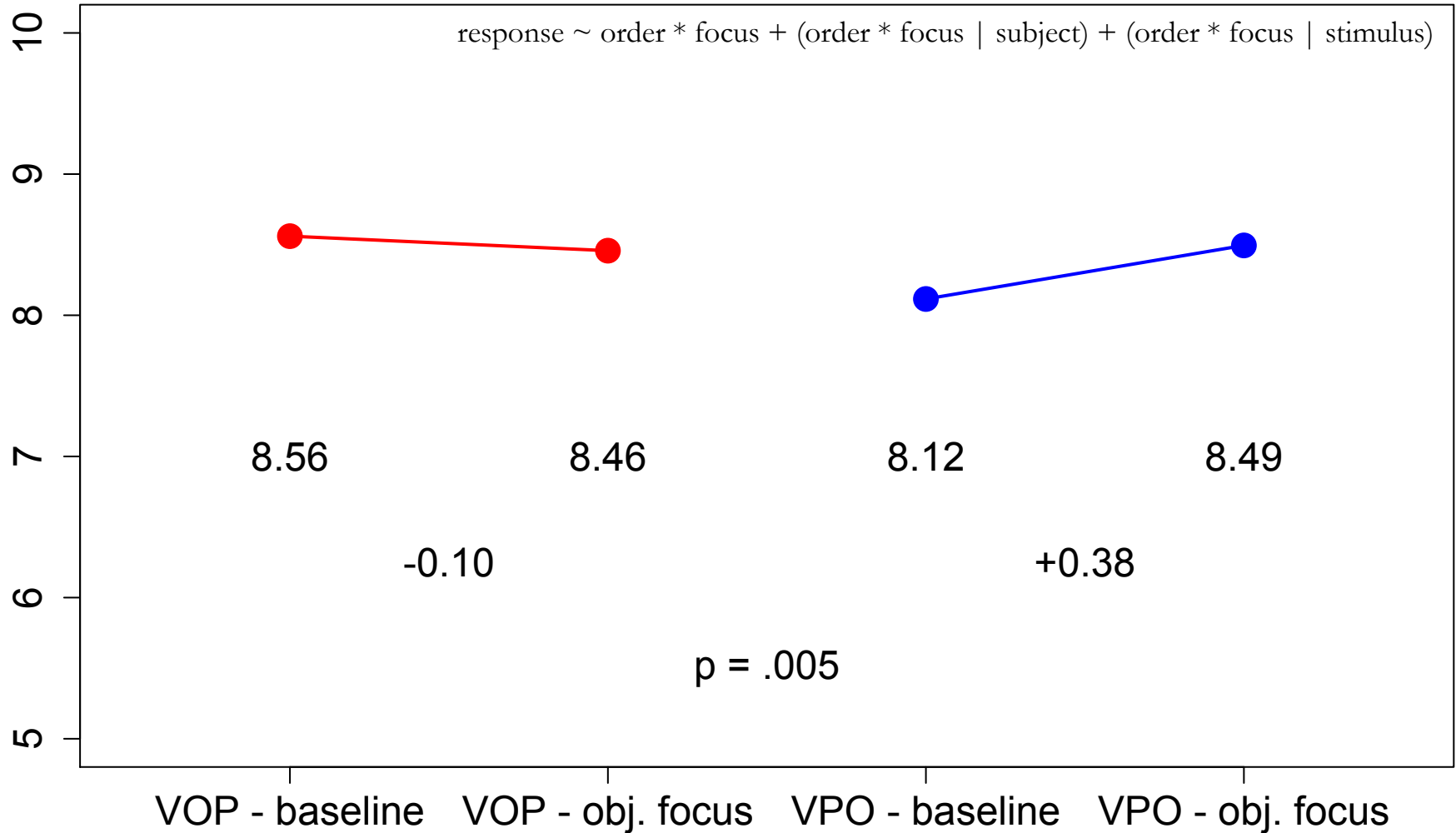
- *What did the friends do?* (VP focus) is the baseline for *What did the friends pass around?* (object focus)
- *What happened?* (wide focus) is the baseline for *What happened to the beer?* (object topic)
- a focused object should...
 - make VPO order better
 - make VOP order worse (probably both)
- a topic object should...
 - make VOP order better
 - make VPO order worse (probably both)

experiment 2: object focus

Preference for VOP order by subject

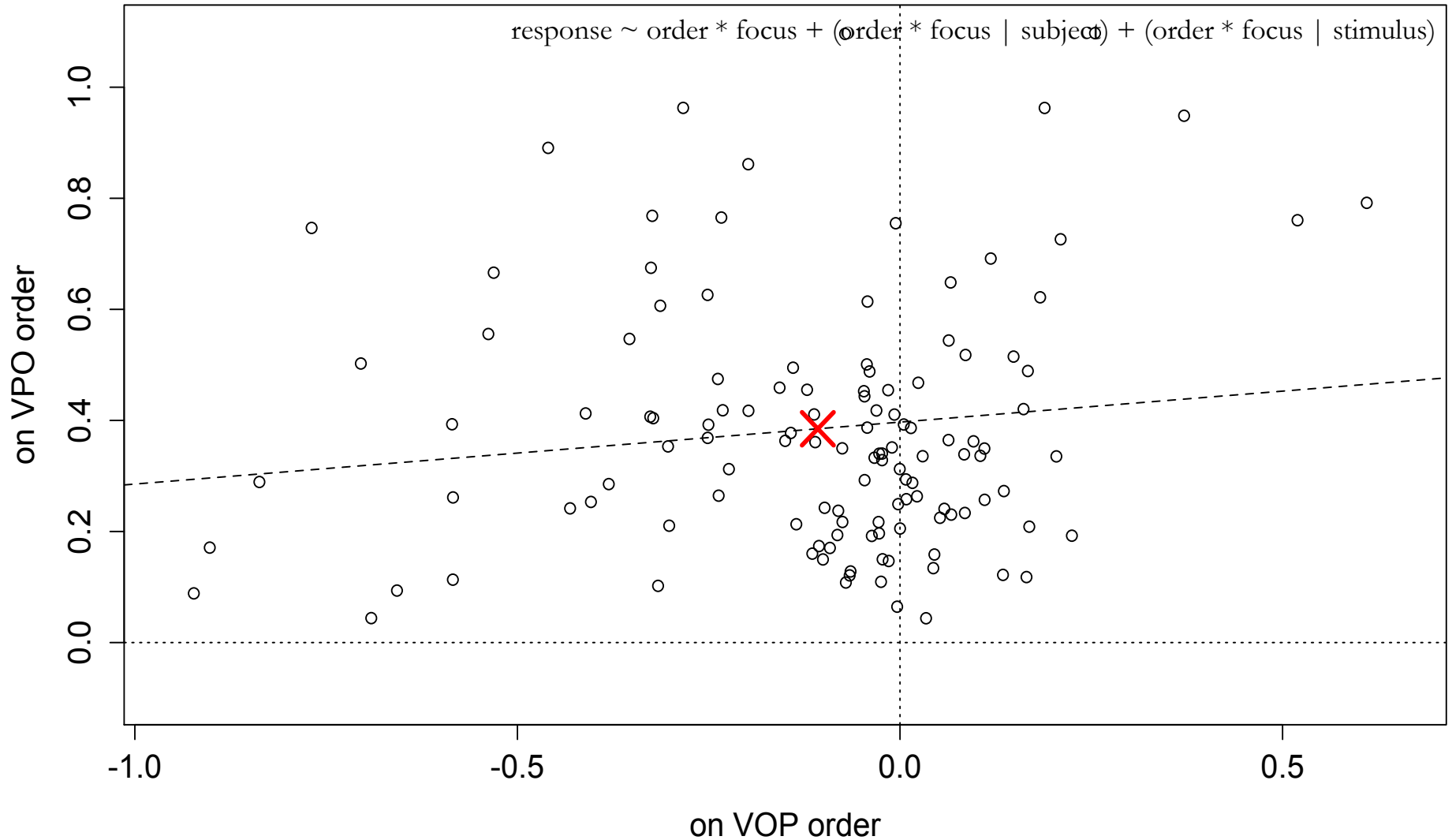


experiment 2: object focus



experiment 2: object focus

By-subject effect of object focus



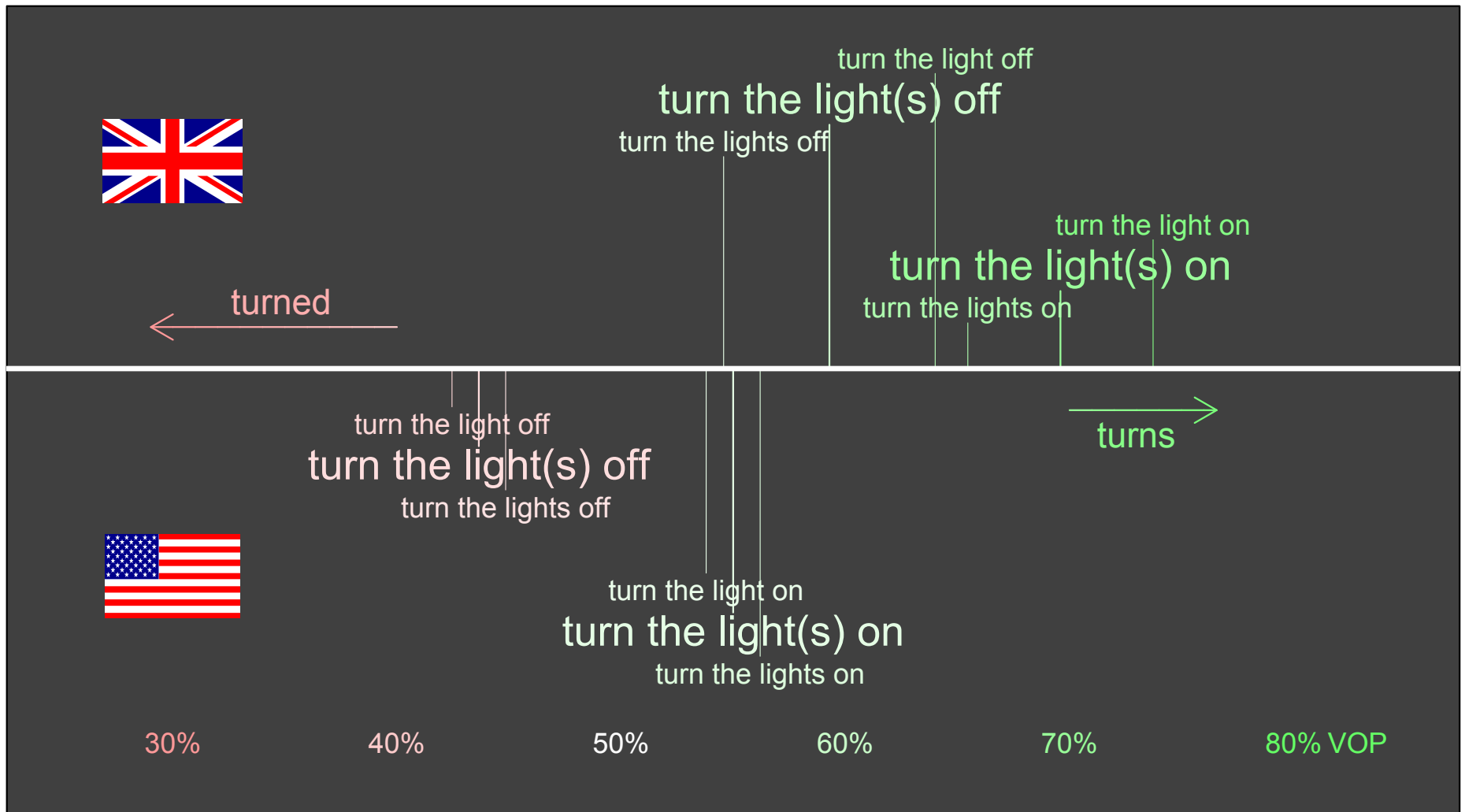
sources of error

- ‘failure’: exp. 1 object oldness, exp. 2 object topic
- ceiling effects: 10 is most common response
- skewed data: not appropriate for linear regression?
- any presentation/acclimation effects
- any persistence/priming effects

- what is relationship between (relative) acceptability judgements and choice probability?

other factors

- experiments focused on processing-related factors
- should be universal, seem to not be universal
- more classic ‘between-speaker effects’
- variety (e.g. USA vs. UK overall, also diff. effects)
- diachronic (evidence of stability then change)
 - exp. 1 Americans, mean age 34, preferred VPO
 - exp. 2 (Americans) mean age 23, preferred VOP
 - corpora: parsed and unparsed
- lexical/discourse
 - most difficult to study, and perhaps most interesting



Twitter Corpus (N = 2001)

V, P, and O are basically held constant

US/UK, off/on, lights/light (UK), turned/turn/turns

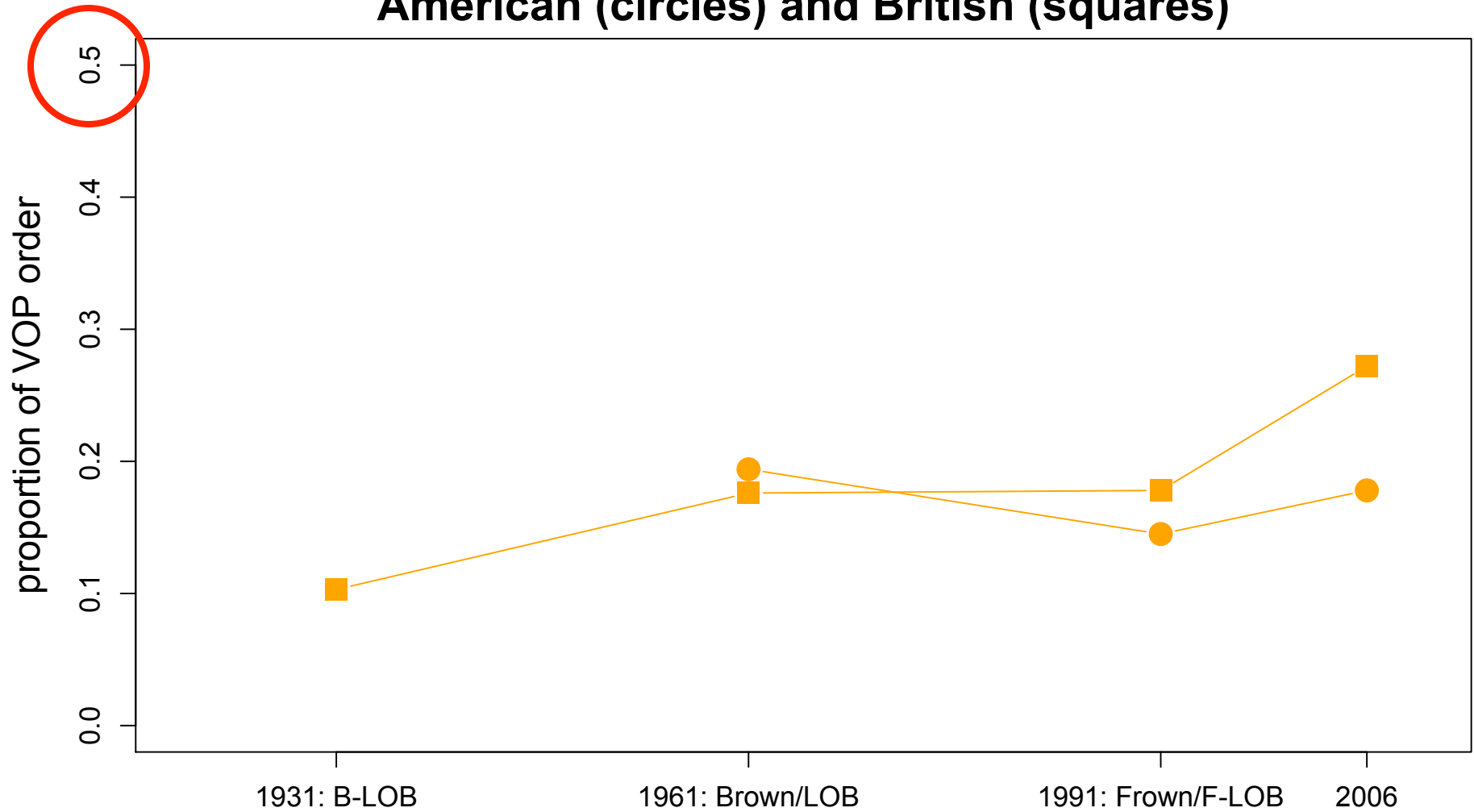
are some just proxies for discourse/contextual effects?

Brown Corpus Family

- 7 corpora: USA '61, '91, '06, UK '31, '61, '91, '06
- 2557 tokens (unparsed corpus paradox)
- controlled for object length: $D + N$
- did not control for information structure
- looking at changes by country and over time
- looking at “lexical effects”
 - not necessarily lexically idiosyncratic effects
 - did not (yet) control for transparency, frequency, etc.

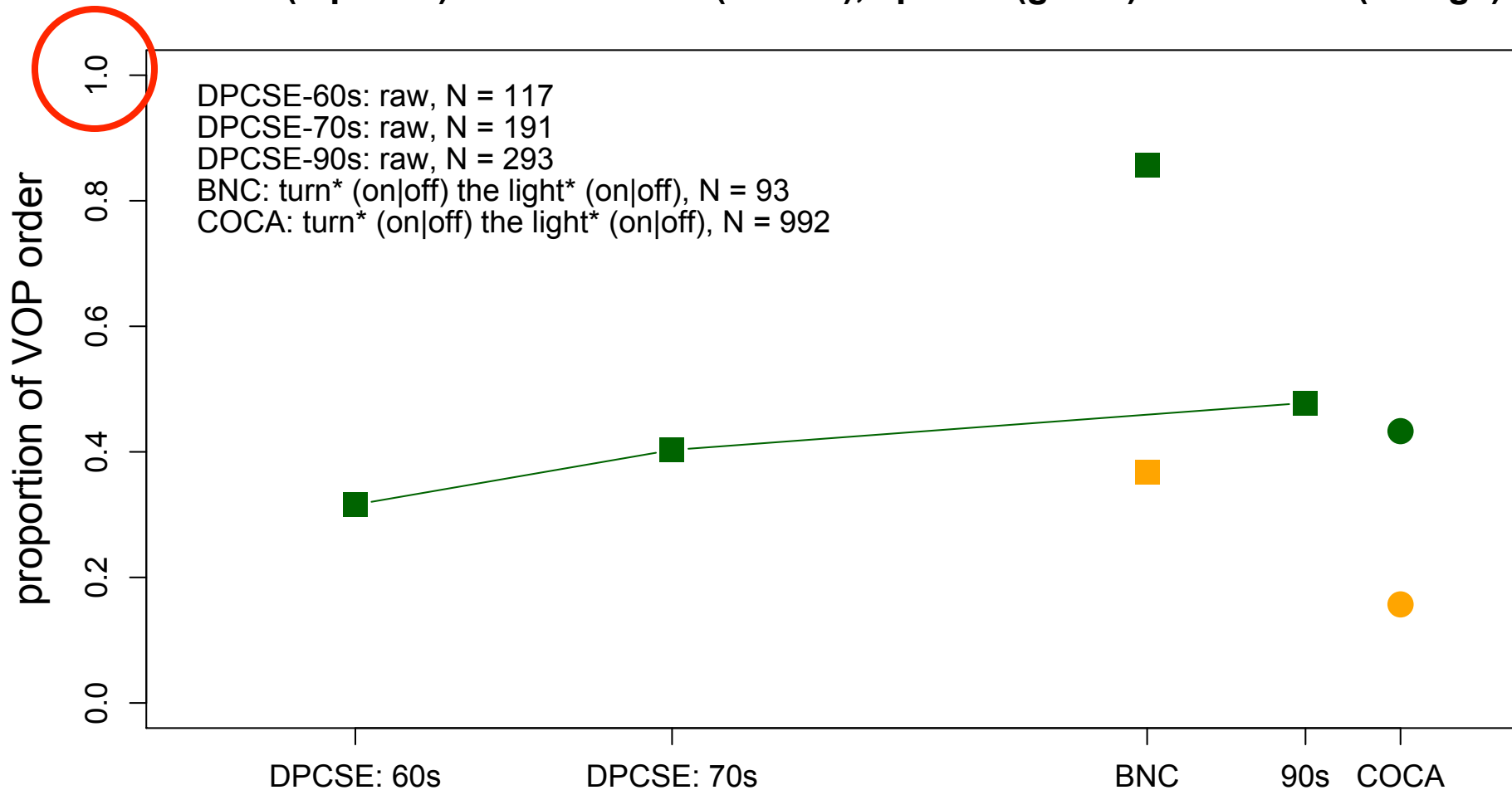
Brown Corpus Family

American (circles) and British (squares)

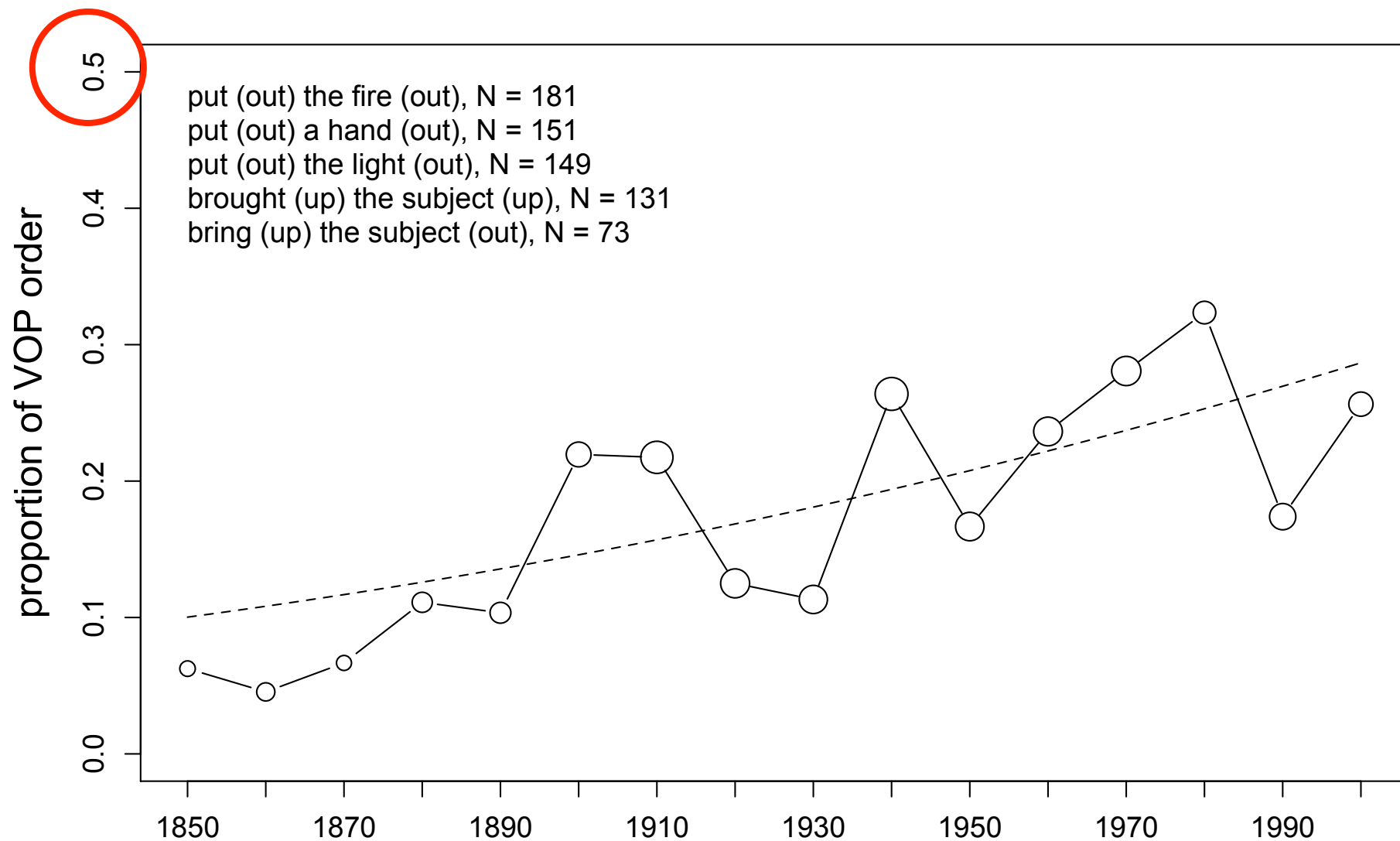


Other 20th century corpora

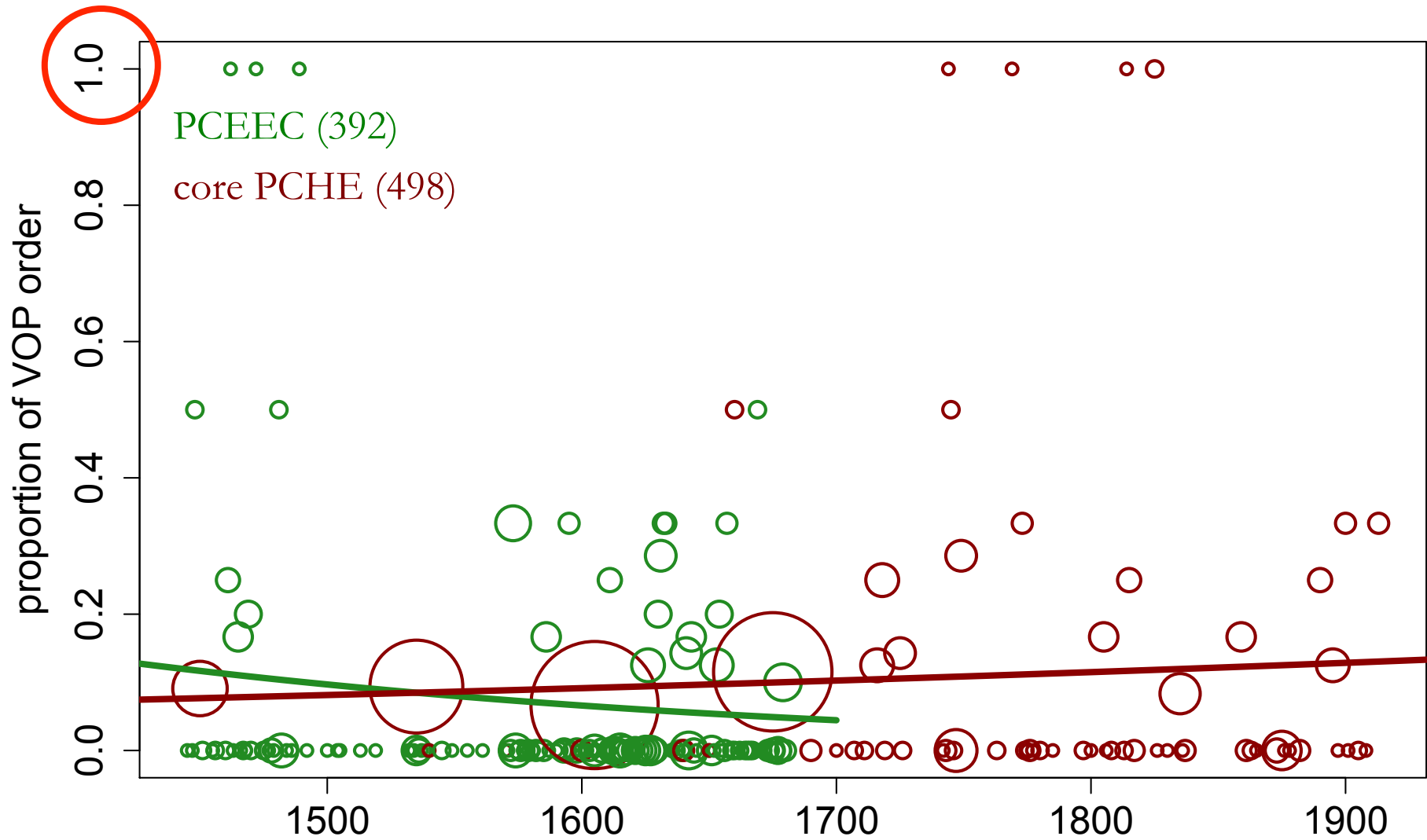
British (squares) and American (circles), spoken (green) and written (orange)



Corpus of Historical American English



Penn Corpora of Historical English



conclusions and questions

- acceptability judgment experiments
 - they sort of work; quantitative results can have advantages
- object weight
 - some inverse relationship from VOP to VPO (‘yoking’)
 - stable positive VPO effect, variable VOP effect (90% neg.)
- object focus
 - no inverse relationship – variable, positive VPO effect
 - very variable, mainly negative VOP effect
- ‘Labovian’ on the surface, different underneath?
- can diachronic change affect alternants separately?

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