Localizing the effects on the English particle verb alternation

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- LAGB Annual Meeting
- 30 August 2013
- Themed session:
  Language variation and linguistic theory

Syntactic Variation

- how does it operate in grammar and in usage?

- Adger & Smith 2010
- Nevins & Parrott 2010
- Kroch 1994
- Bresnan et al. 2007

- morphosyntax: e.g. variation in *is/are, was/were*
- Big Two syntactic alternations: dative, particle verb

The Particle Verb Alternation

- Rebecca cut open the pineapple. (VPO order)
- Rebecca cut the pineapple open. (VOP order)

- historically VOP rare, stable – 20th c. increase
- spoken registers favor VOP more than written
- UK now favors VOP more than US does
- meanings range from transparent to idiomatic
- very extensively studied for over 100 years

The Main Linguistic Constraints (O)

- object weight (heavy favors VPO)
  - I cut open the big juicy pineapple from Tesco.
  - ? I cut the big juicy pineapple from Tesco open.
  - two reasons: ordinary end-weight, V-P dependency
- object information structure (new favors VPO)
  - What did you pick up at the supermarket?
  - I picked up some fish. – ? I picked some fish up.
- object topic/focus (focus favors VPO)
  - overlaps w/ info. structure, but can be independent

The Main Linguistic Constraints (V, P)

- exclude full V, P, O idioms: either fixed order
  - bring home the bacon
  - keep your shirt on
- V, P continuum from idiomatic to transparent
  - when V and P meanings independent, VOP easier
  - give up, carry out vs. turn around, carry out (literal)
- effects of V and P (independent of the other)
- context beyond discourse: put the kettle on
- persistence effects: previous particle verbs

Our Syntactic Proposal

- the alternation can arise in two (three) ways

- ***Head raising of the particle***

  $[_{PredP}$ P-p-Pred $[_{pP}$ OBJECT $[_{p'}$ P-p $[_{PP}$ P $]]]]$

- ***Old information object contexts***

  cut $[_{TopicP}$ $[_{DP}$ the tree$]_{[TOPIC]}$ $[_{Topic'}$ Topic $[_{PredP}$ $[_{DP}$ the tree] down$]]]$

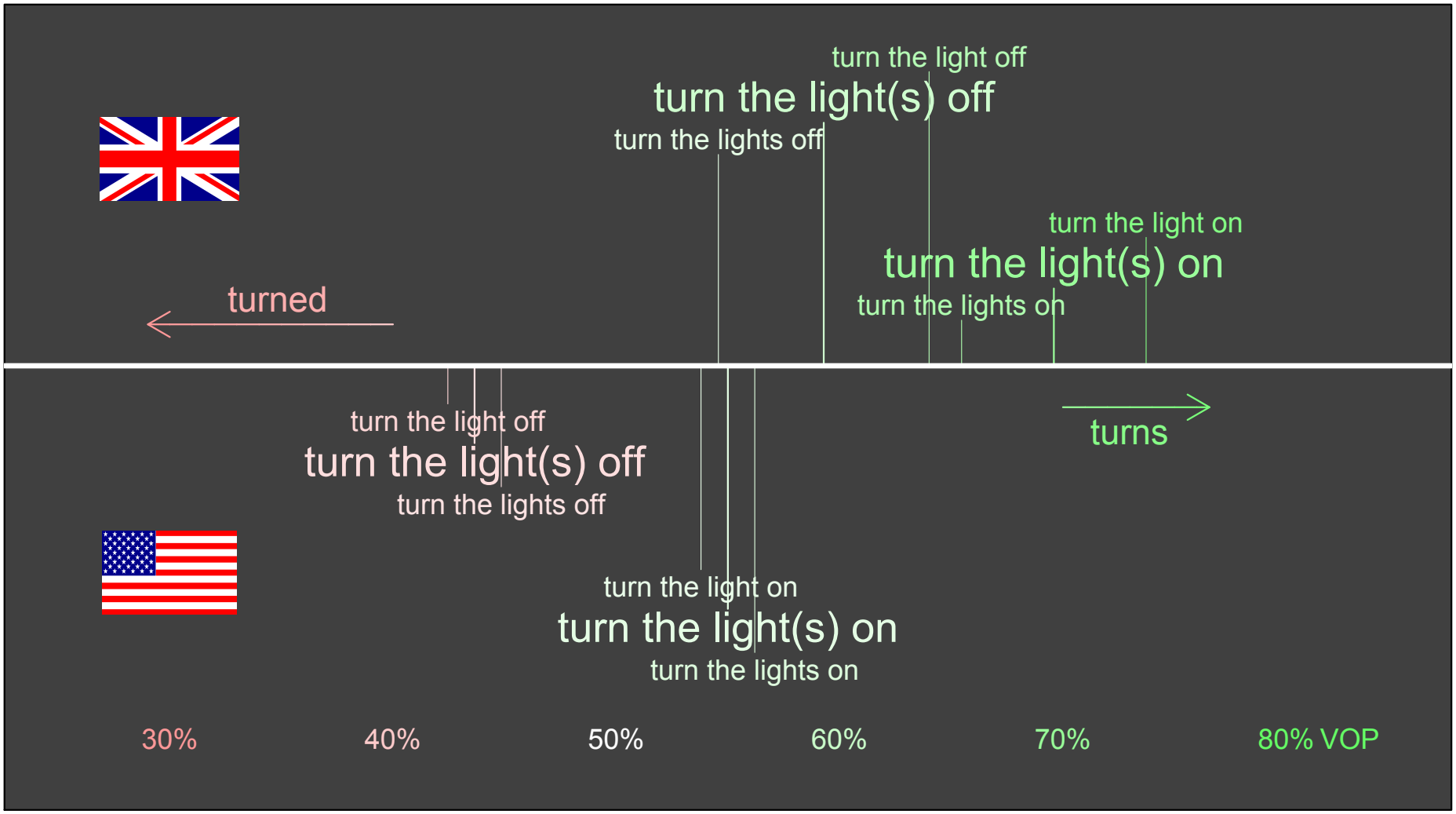
- ***Narrow object focus contexts***

  cut $[_{TopicP}$ down$_{[TOPIC]}$ $[_{Topic'}$ Topic $[_{PredP}$ the tree down$]]]$

Data Sources & Methods

- previous studies: corpora, lexical decision task, forced choice, relative rating of alternatives
- this study: acceptability judgment experiments, corpus studies (Twitter, Brown Family)

- analysis: mainly mixed-effects regression
- new: exp. subjects rated orders separately
- new: effect correlations across subjects reveals…

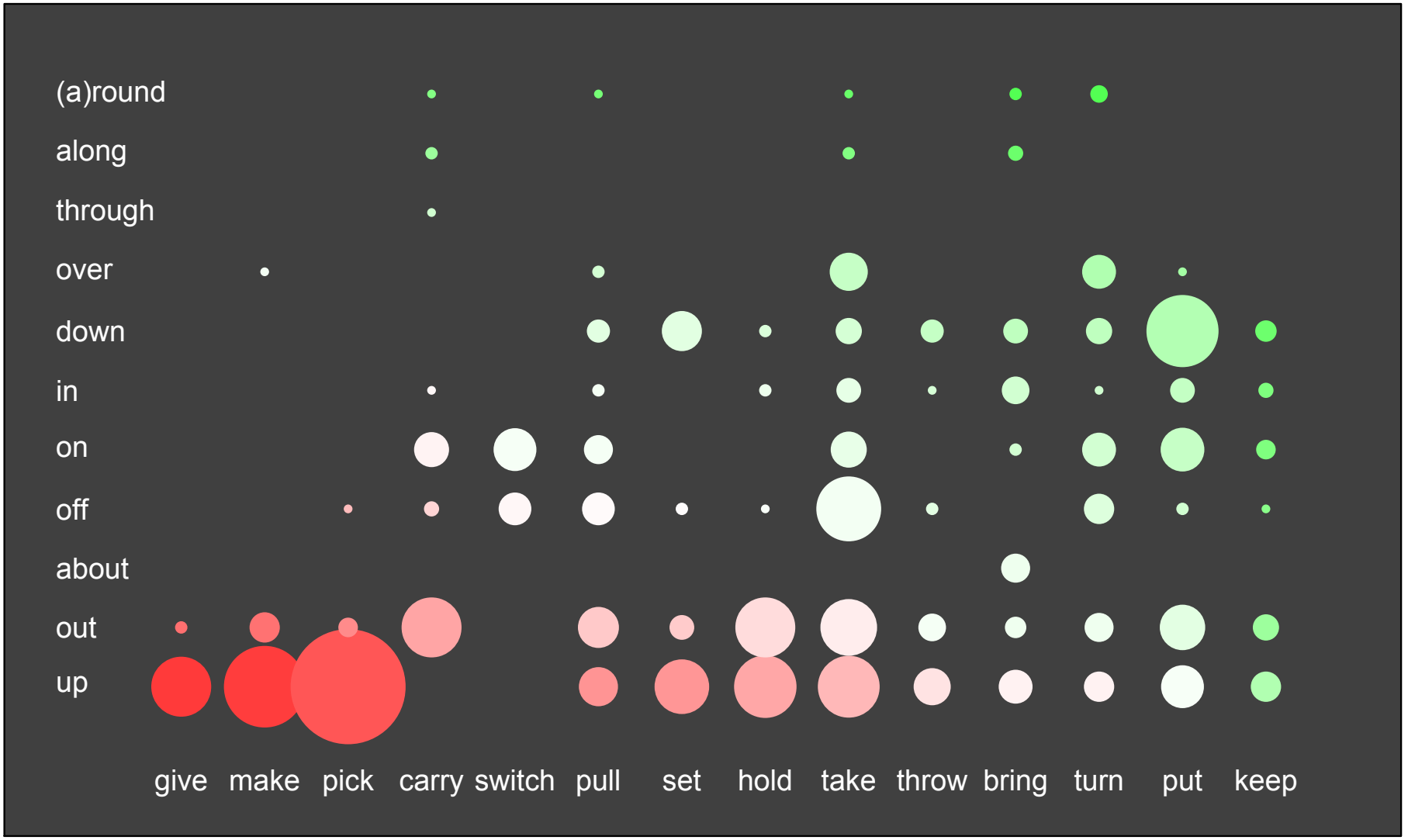


Twitter Corpus (N = 2001)

V, P, and O are basically held constant

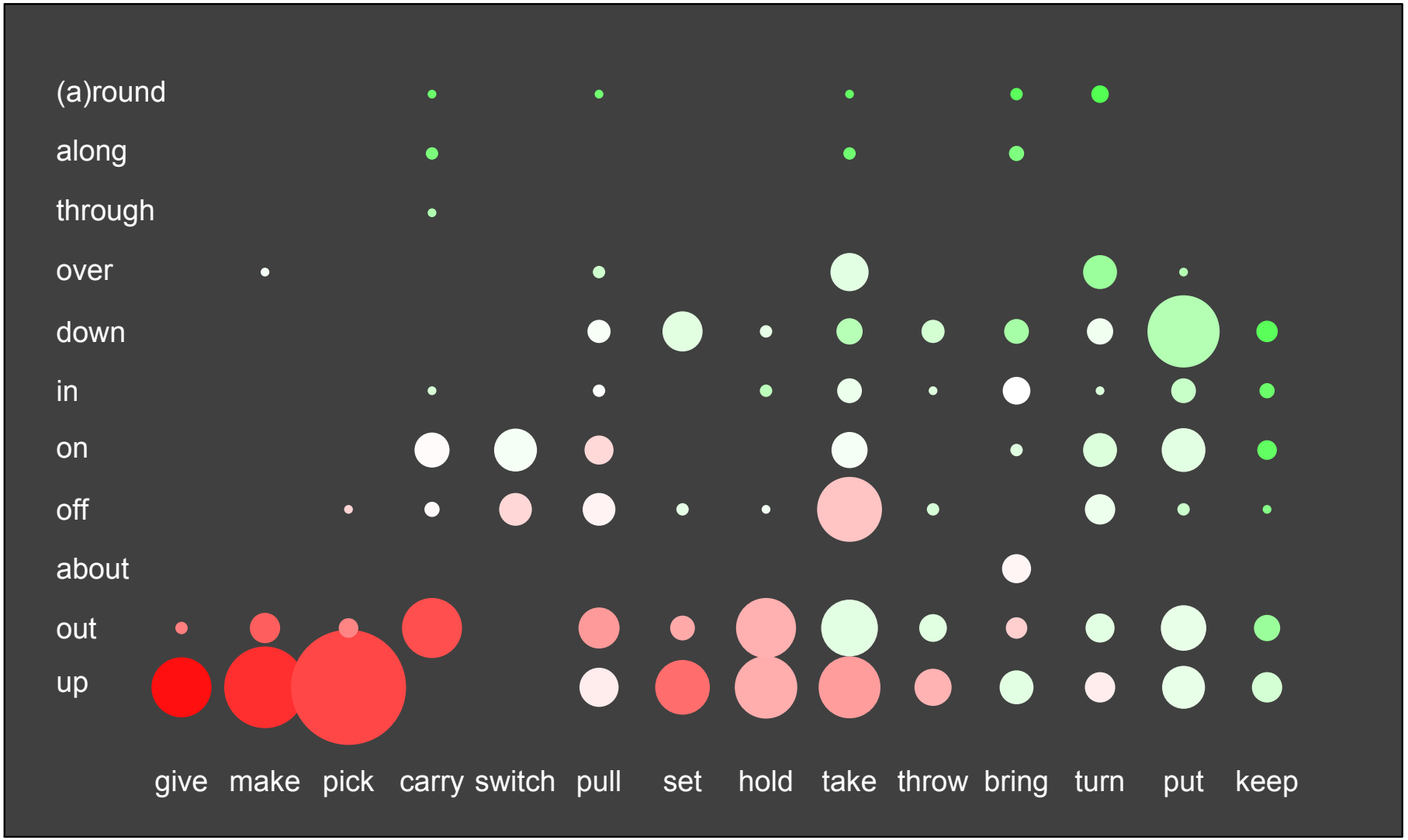
US/UK, off/on, lights/light (UK), turned/turn/turns

are some just proxies for discourse/contextual effects?



Brown Corpus Family (N = 2557)

object = D + N, VP transparency not controlled



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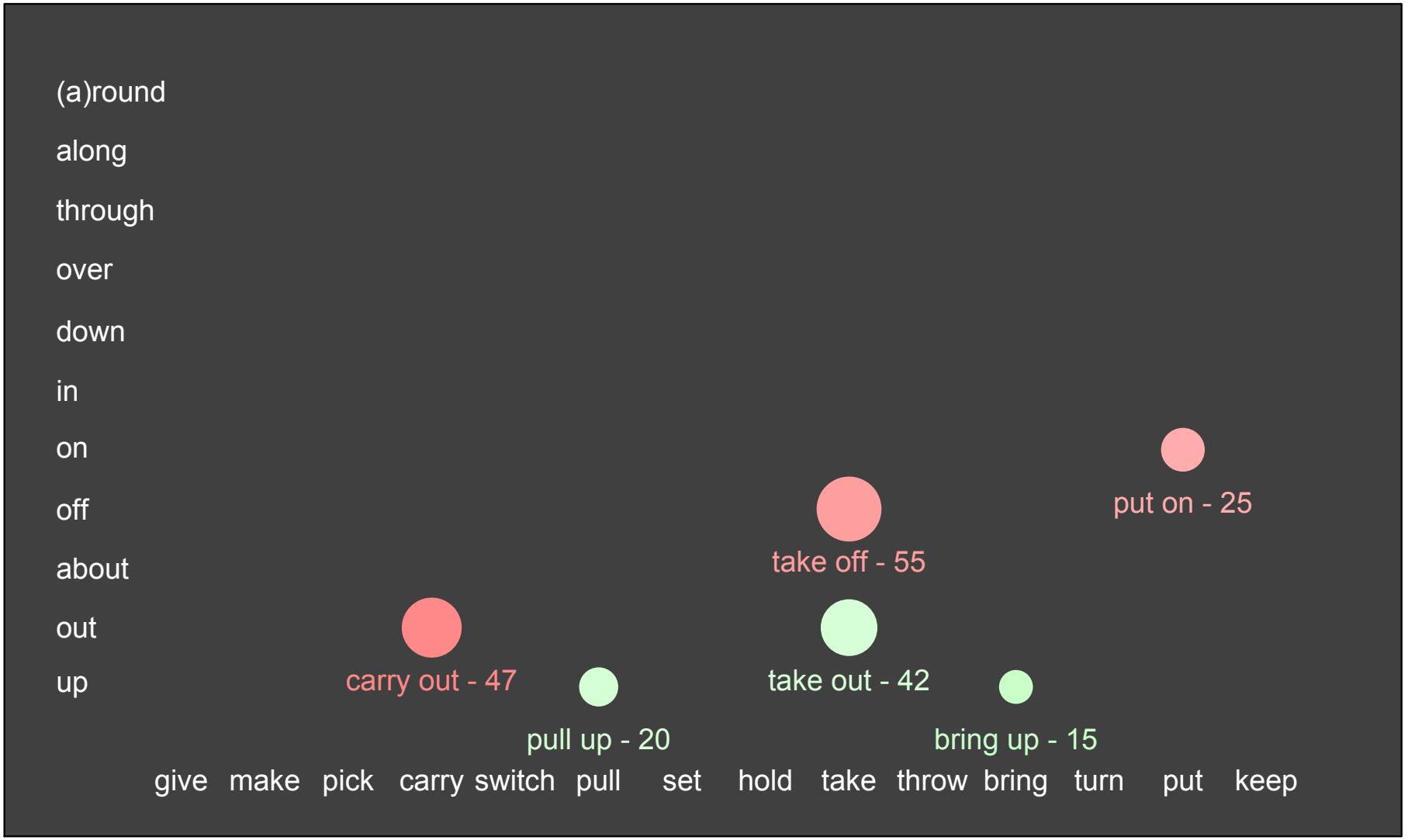

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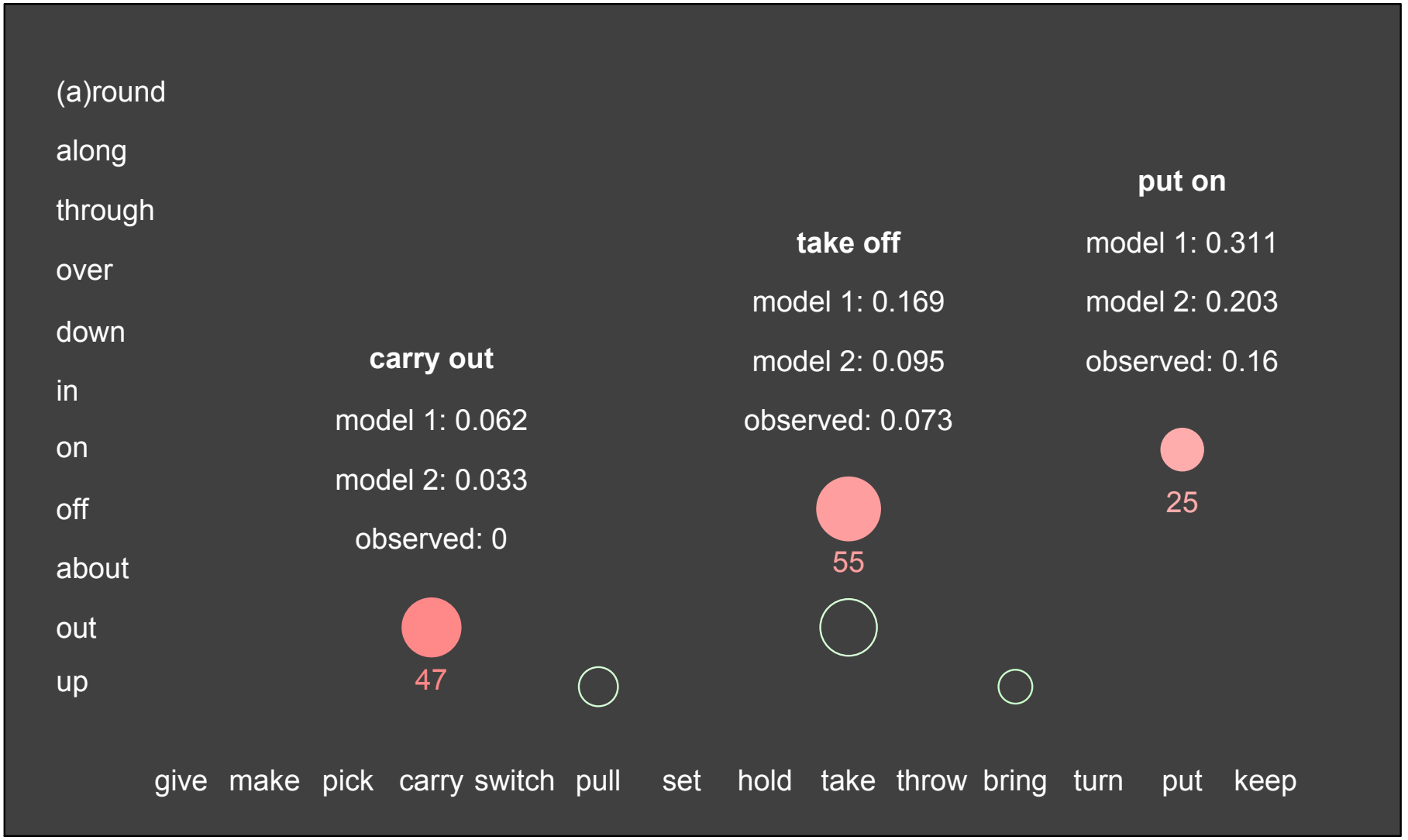

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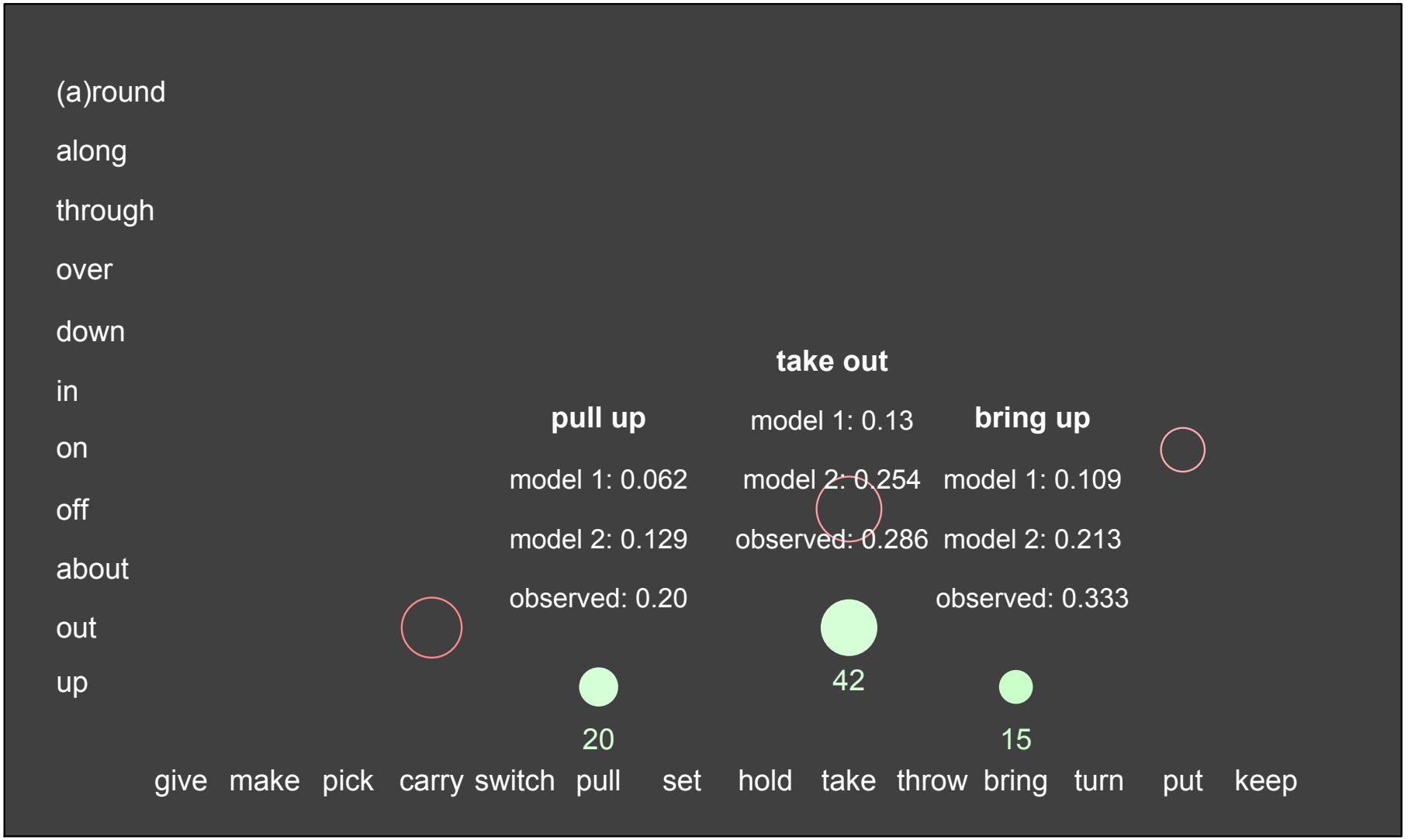

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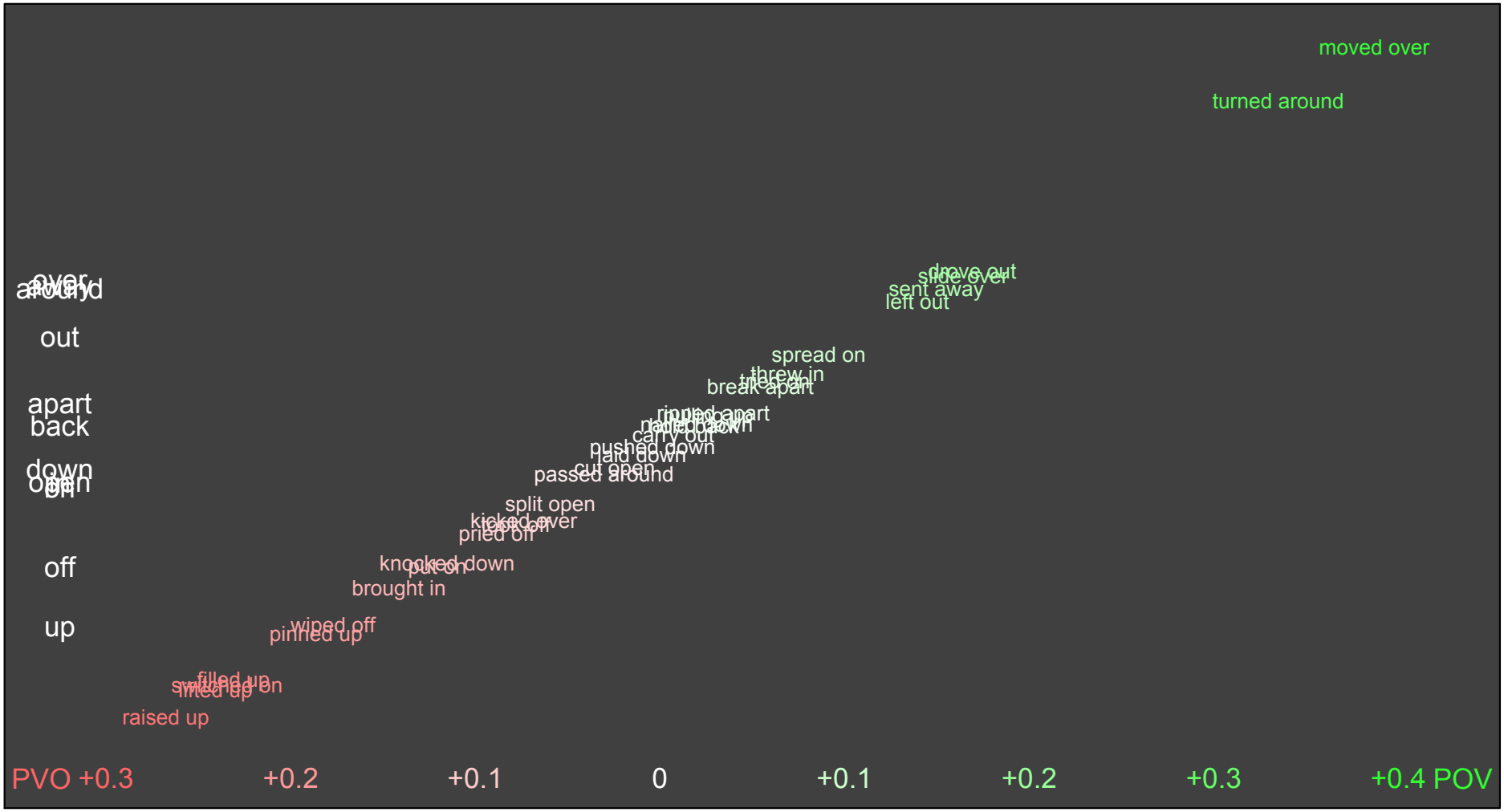
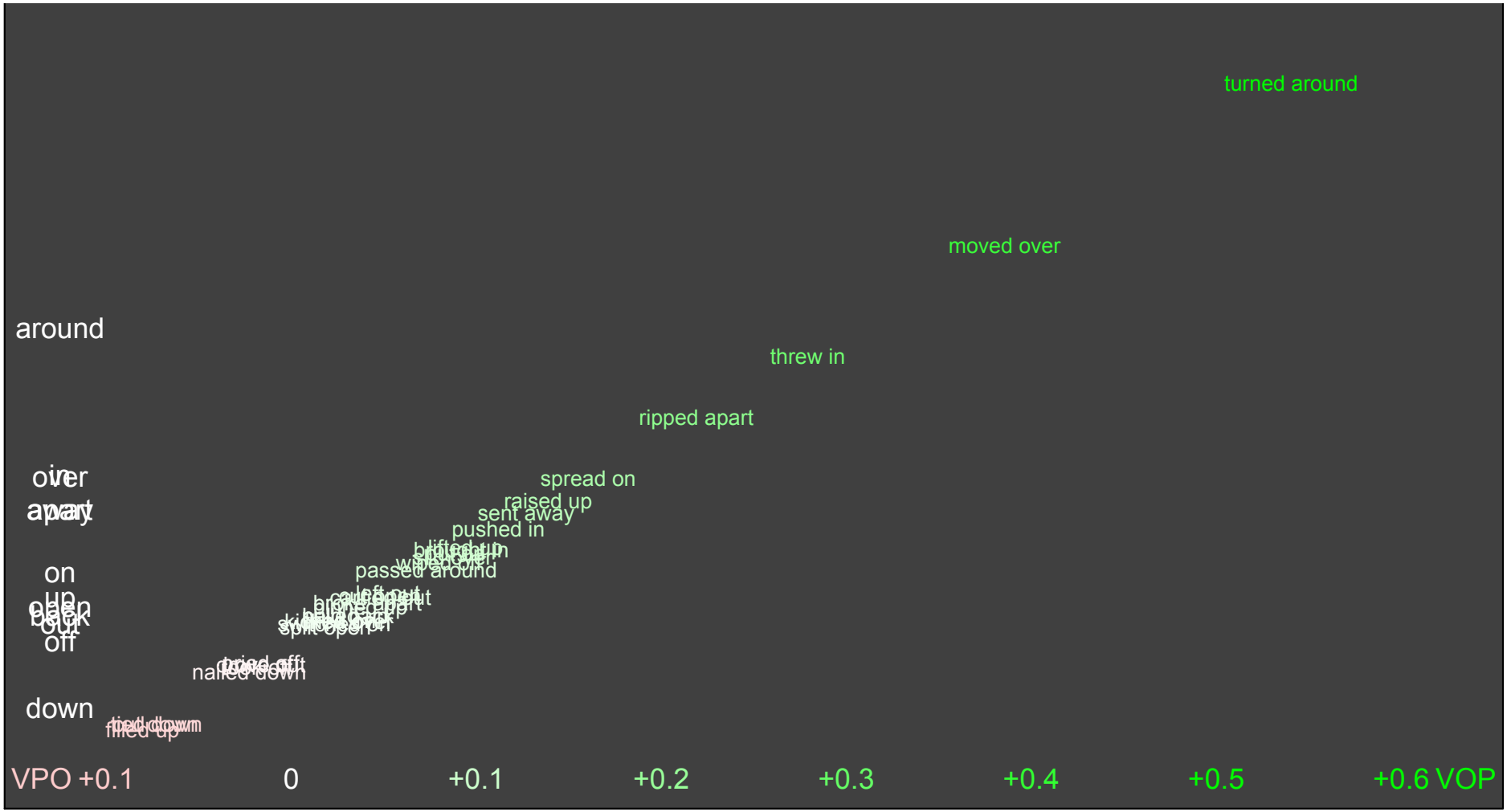


Experiment 1 (297 subjects from US, Canada, UK/Ireland)

all VPs have transparent semantics

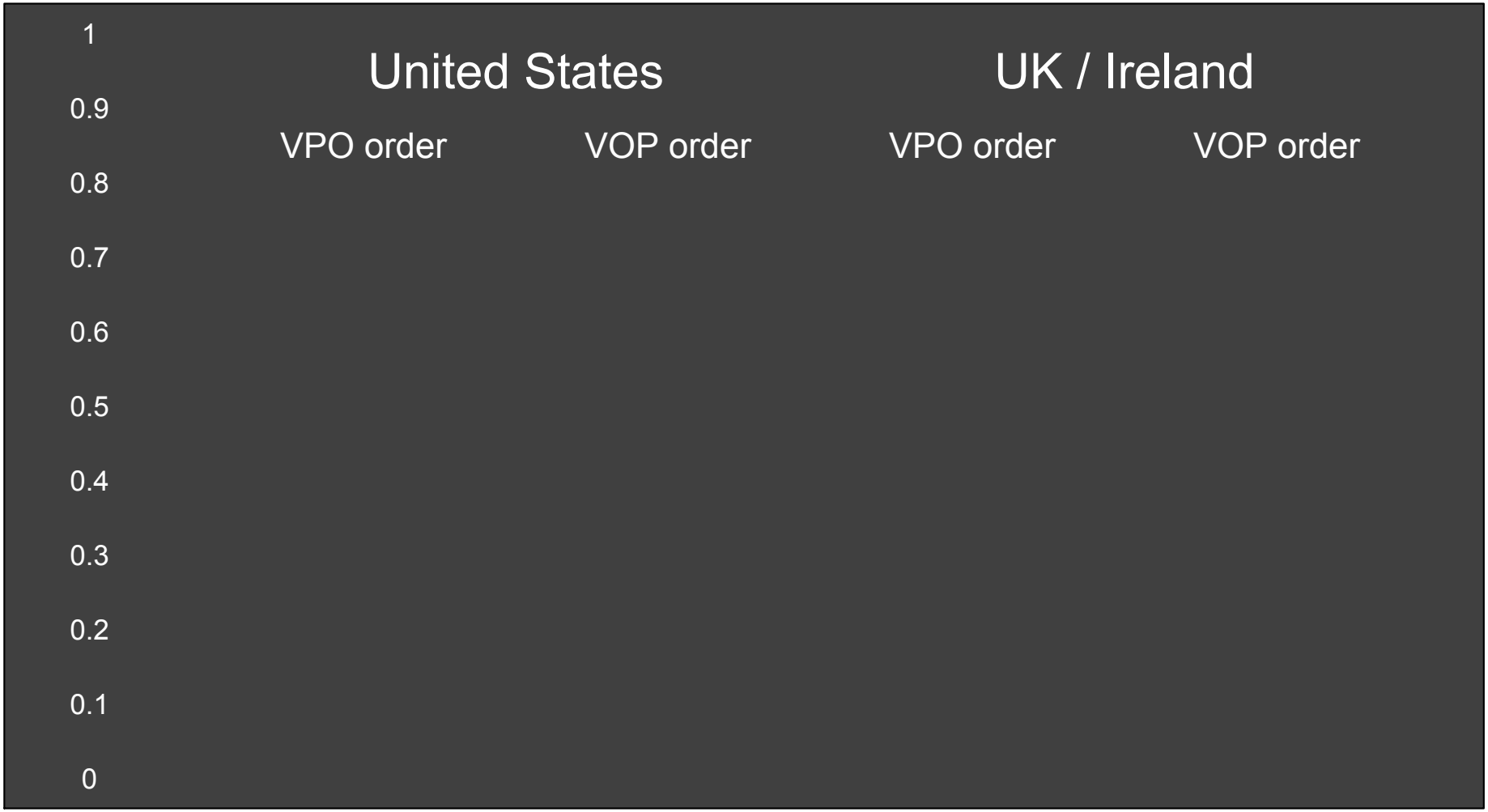
object weight (and information structure) controlled for



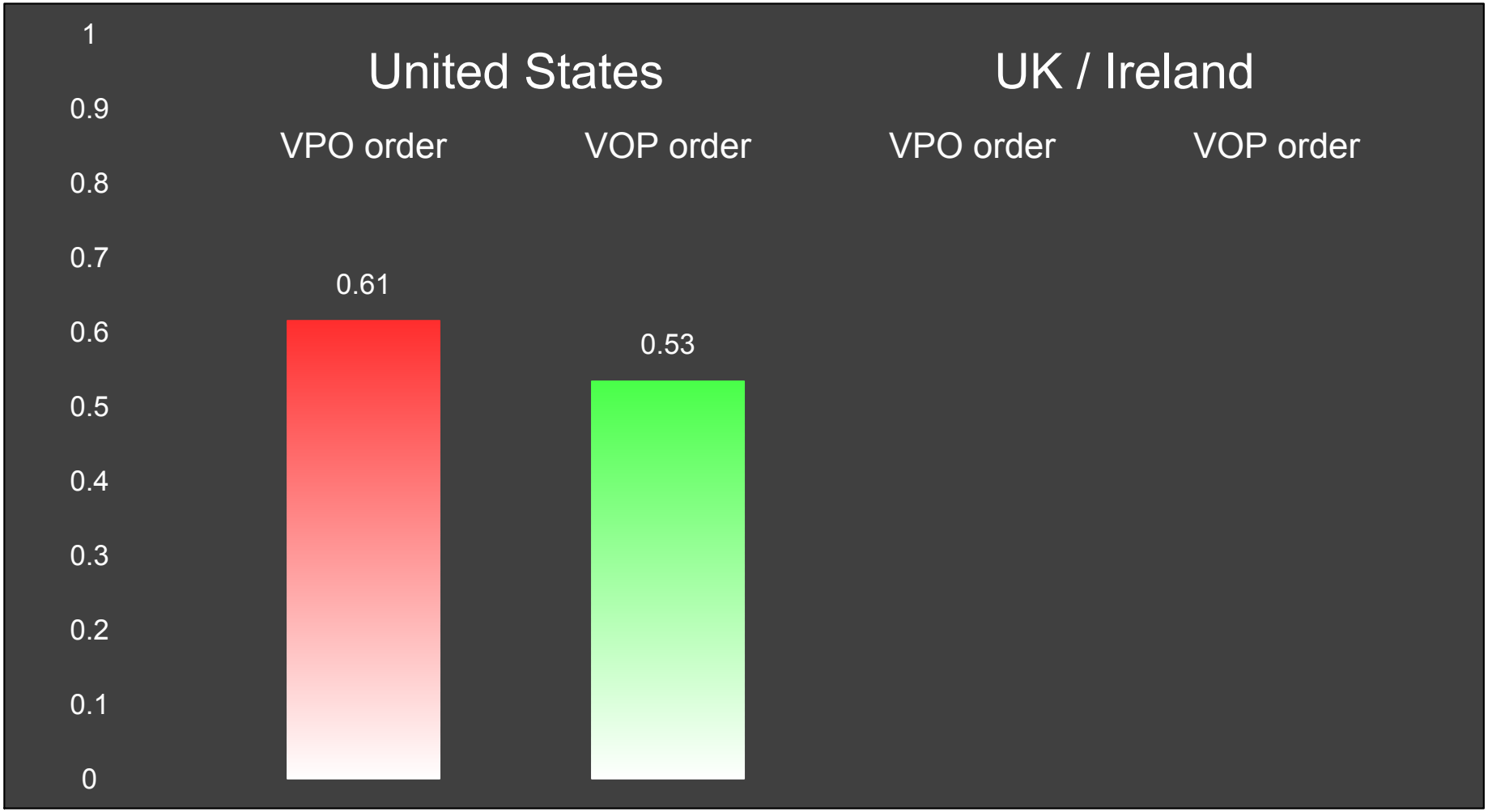
Experiment 2 (125 subjects from US)

all VPs have transparent semantics

object = D + N, focus controlled for



Experiment 1 – country effect



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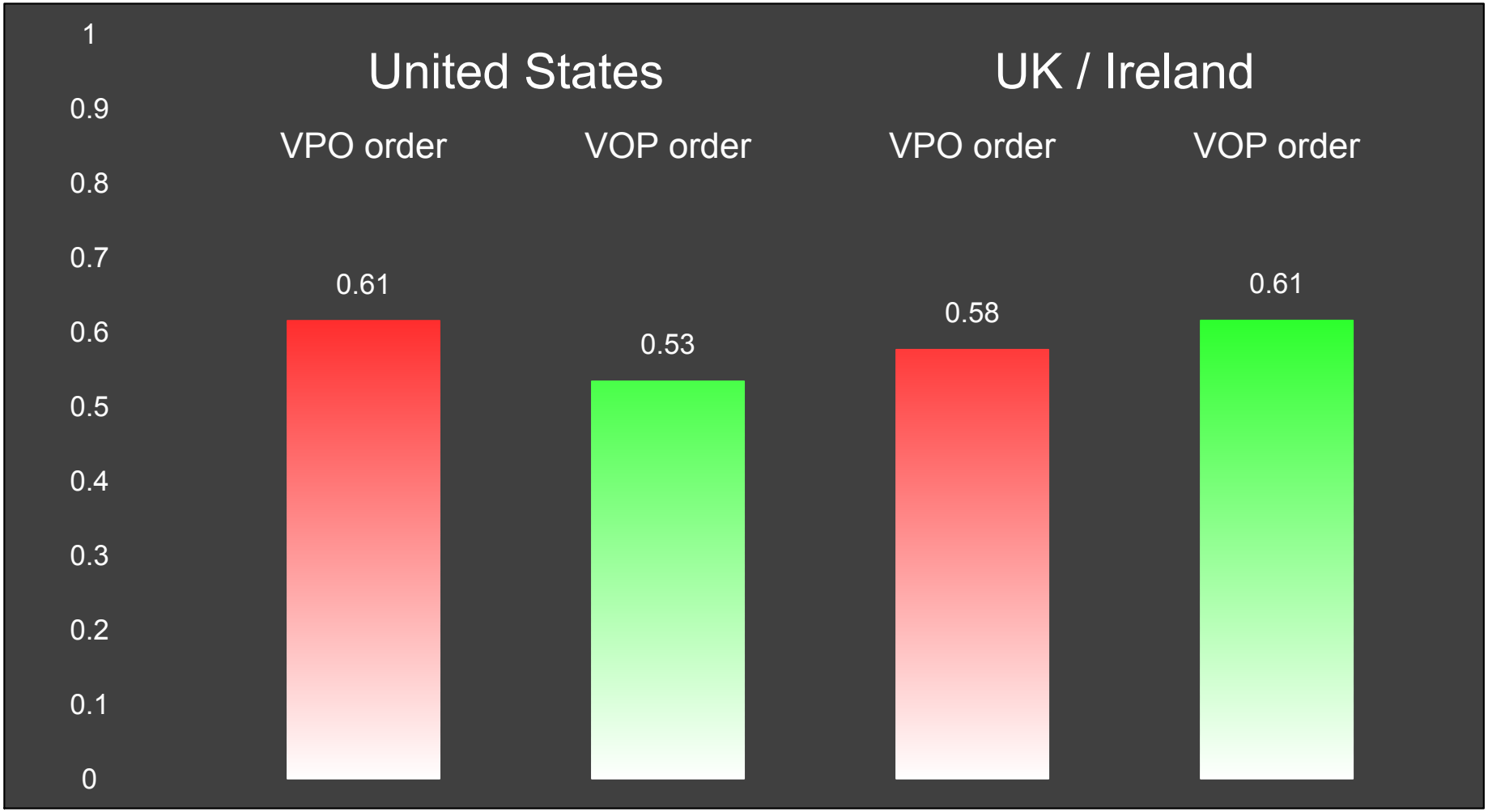

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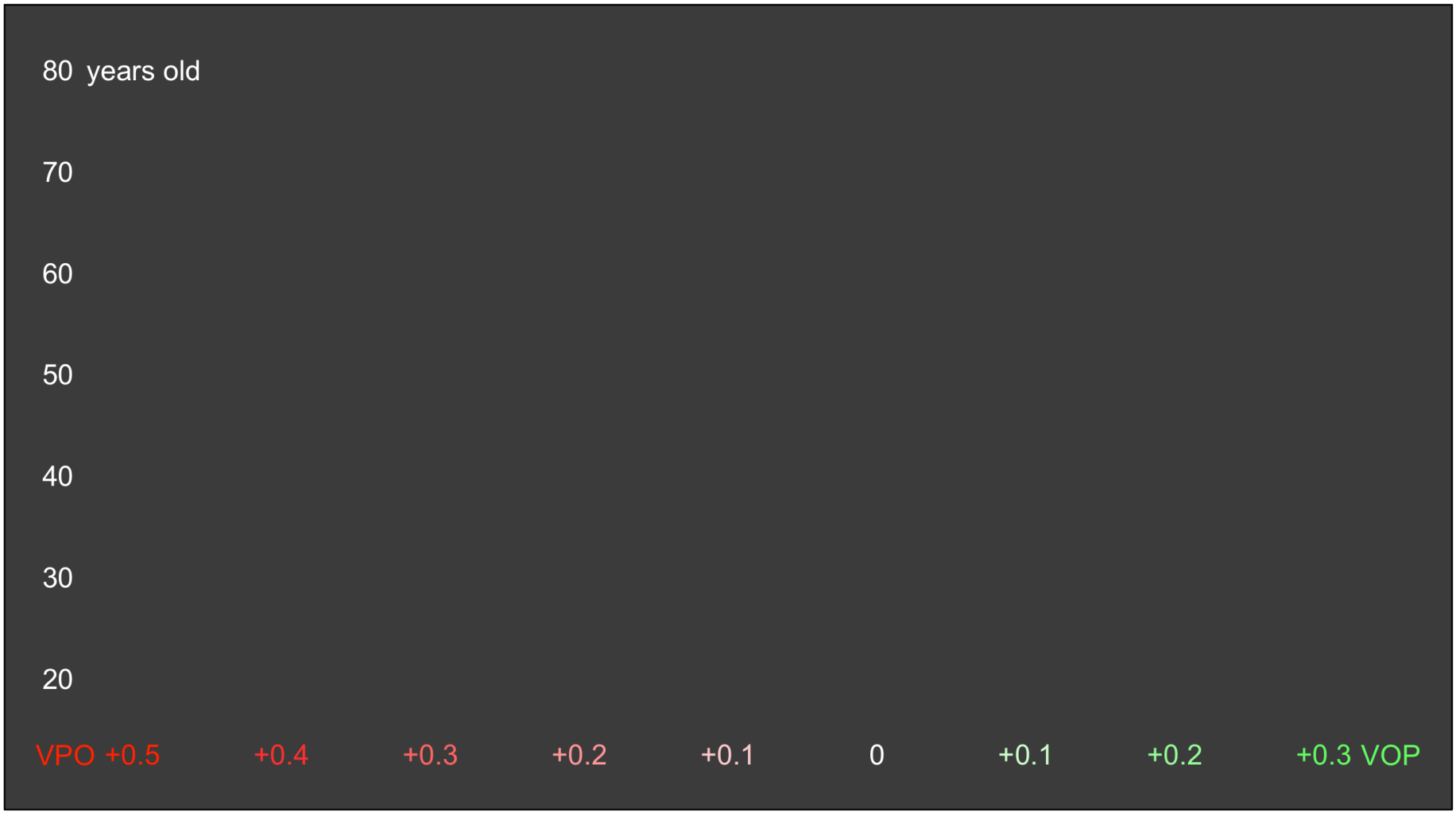

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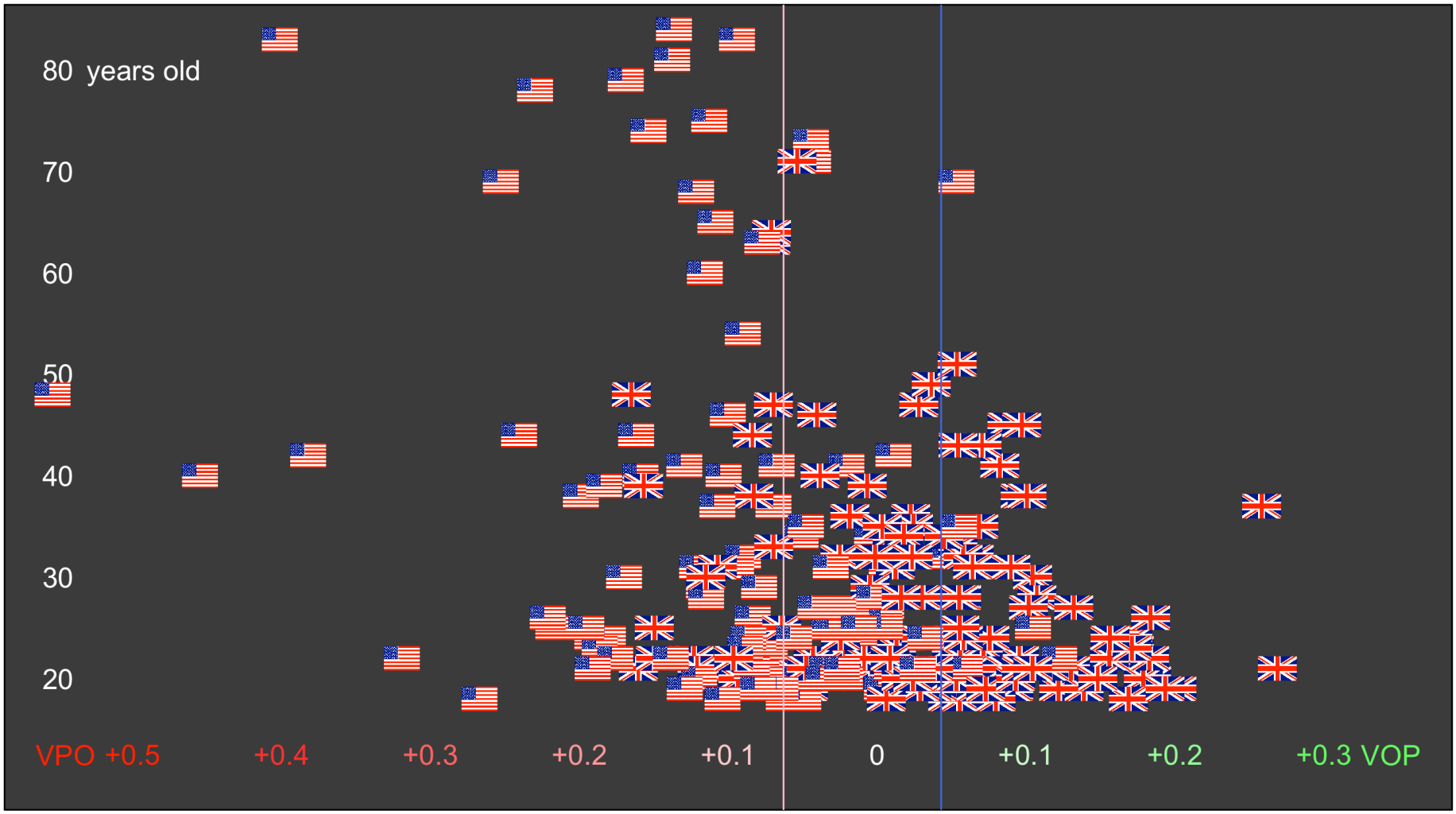

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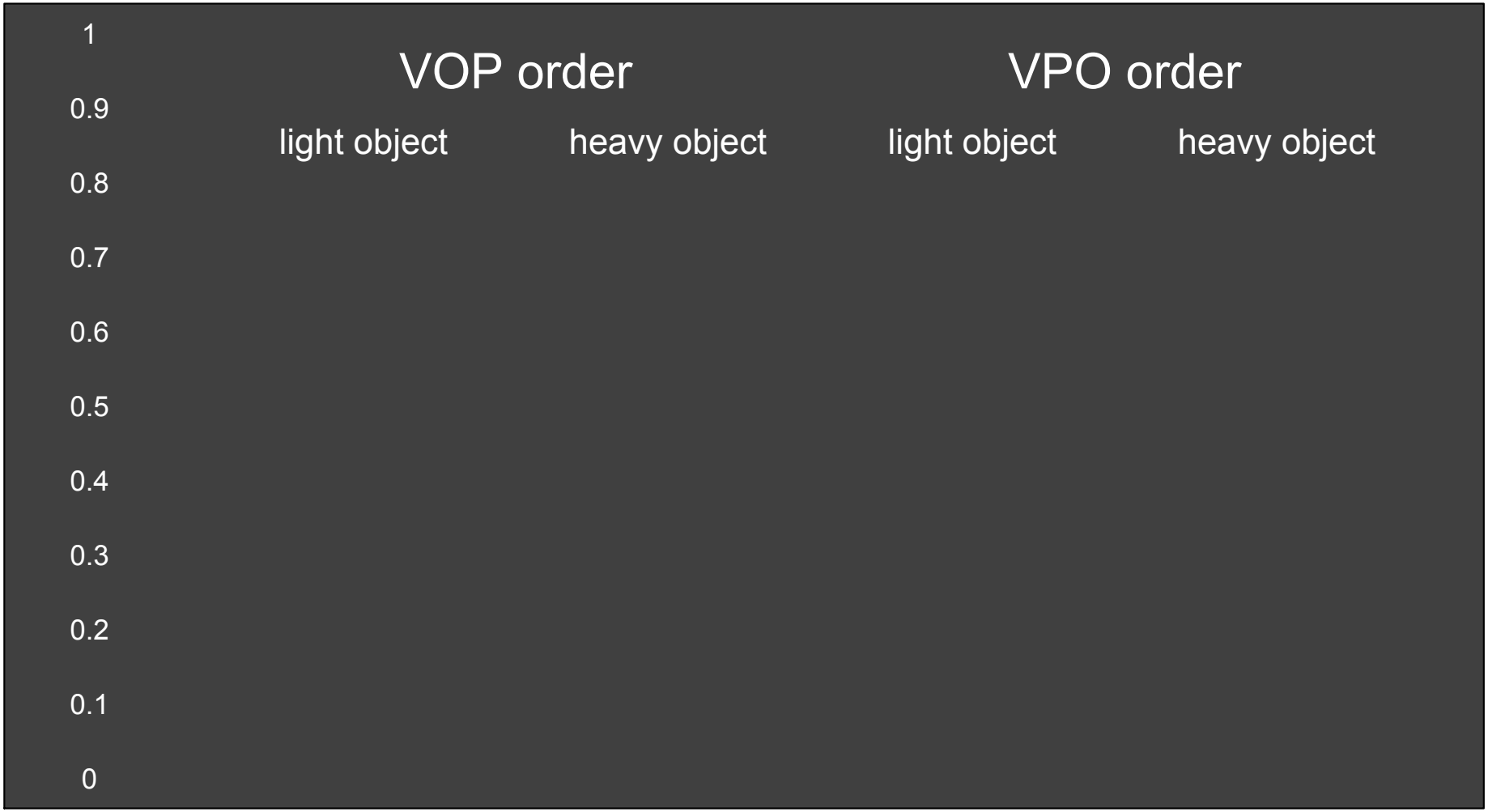
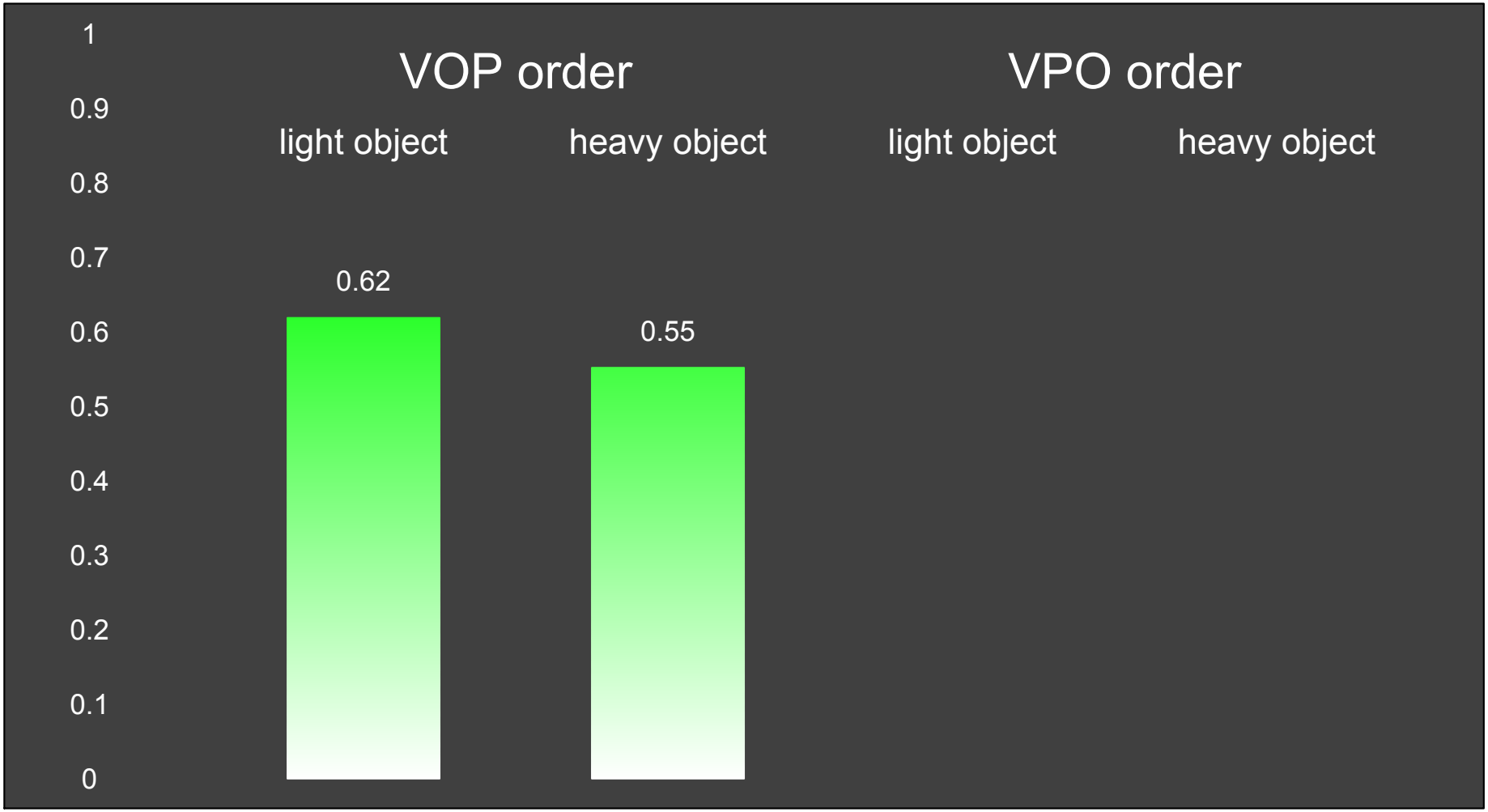


Experiment 1 – weight effects



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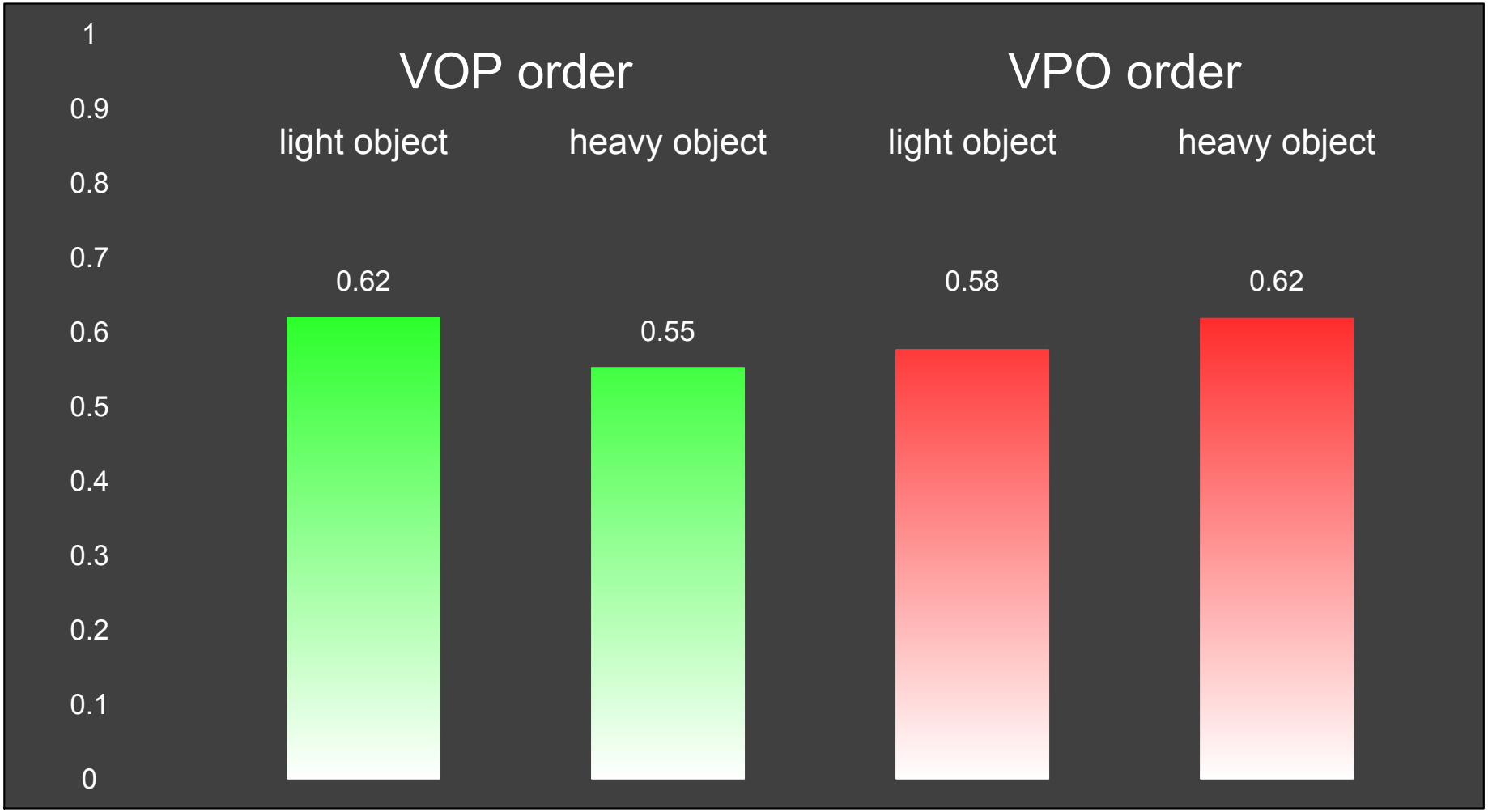
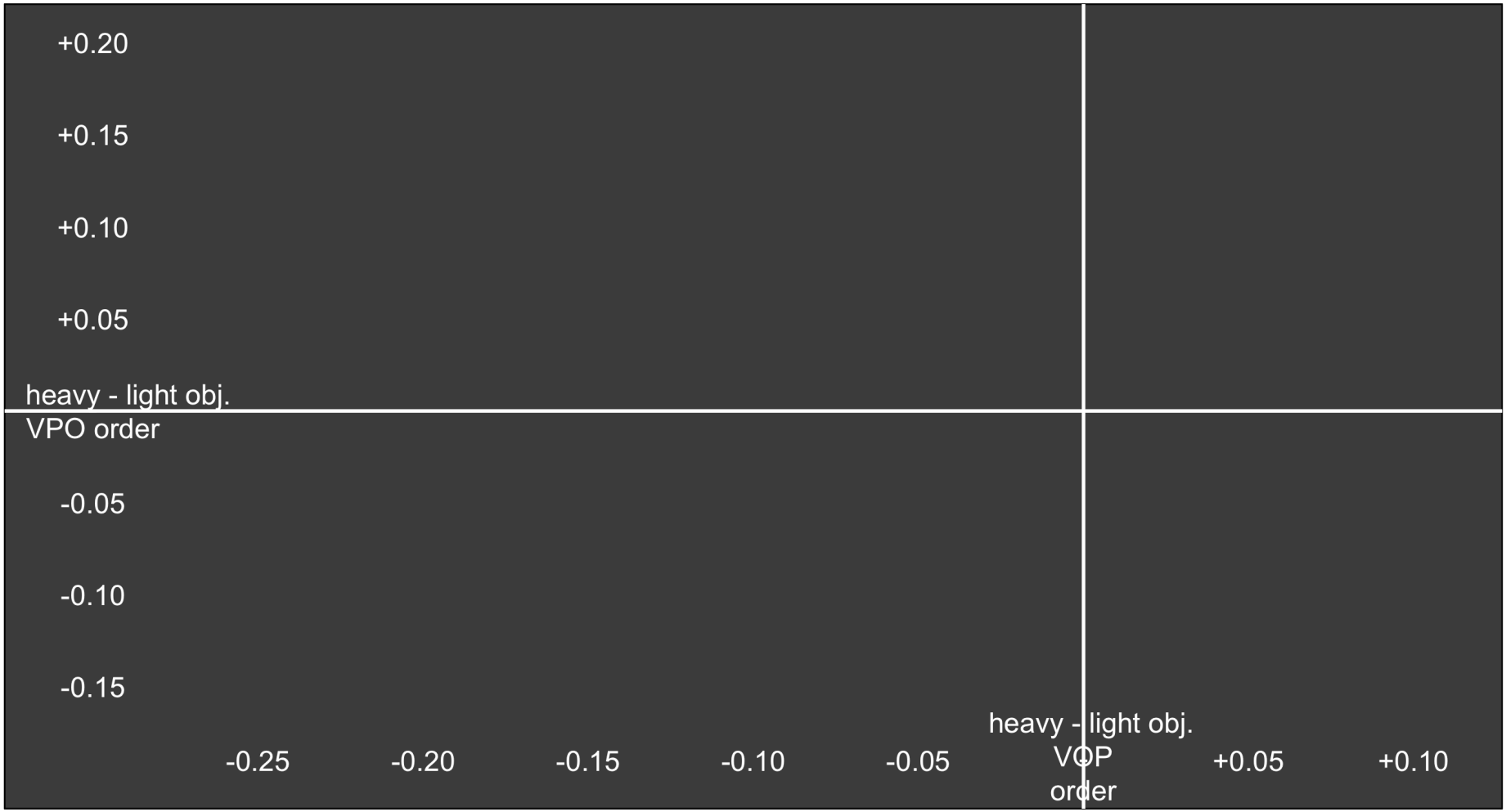


Experiment 1 – weight effects

production
vs.
prediction



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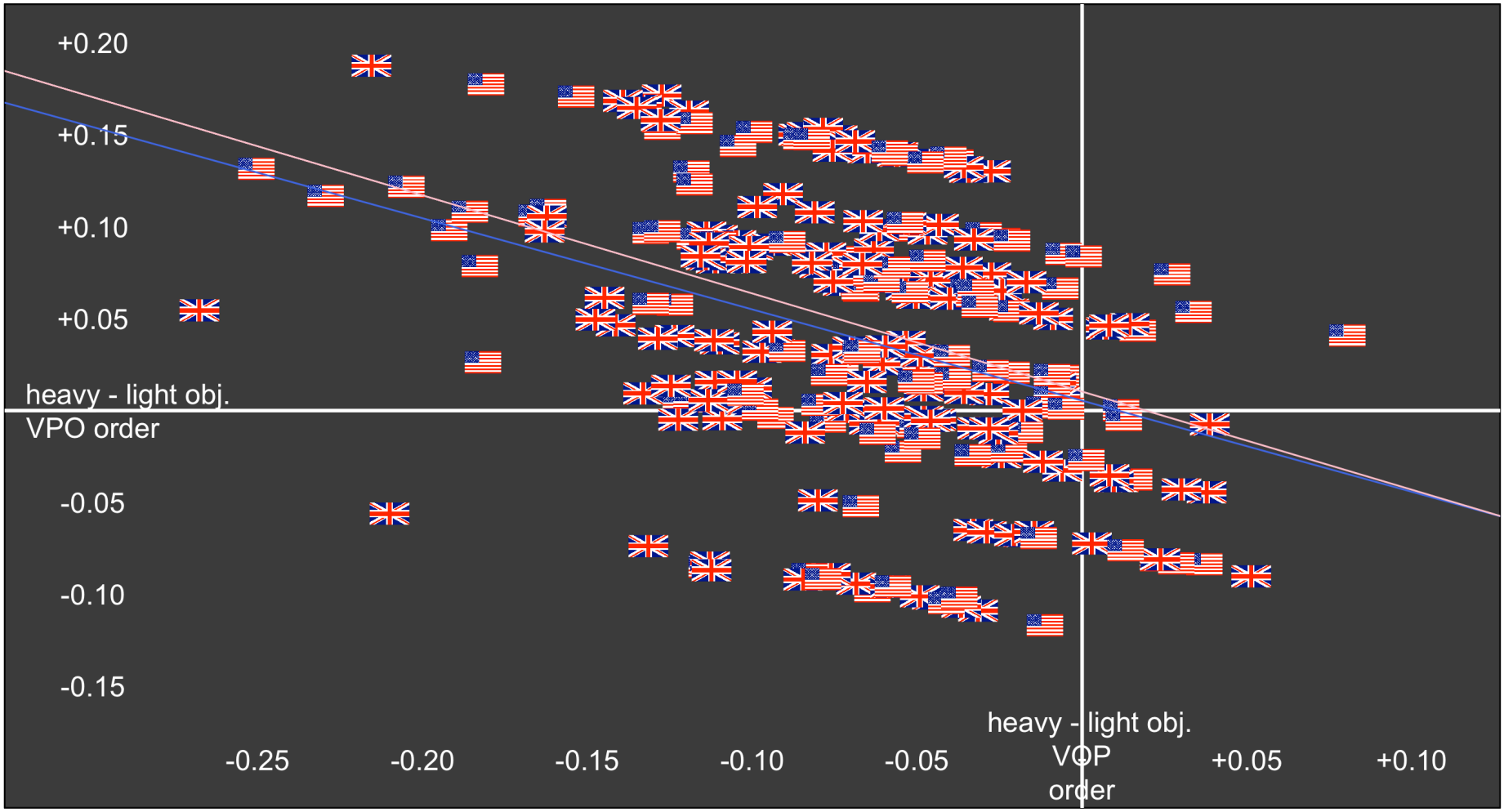

Experiment 1 – weight effects

r = -0.392
b = -0.522
p ≈ 0

Experiment 2 – focus effects

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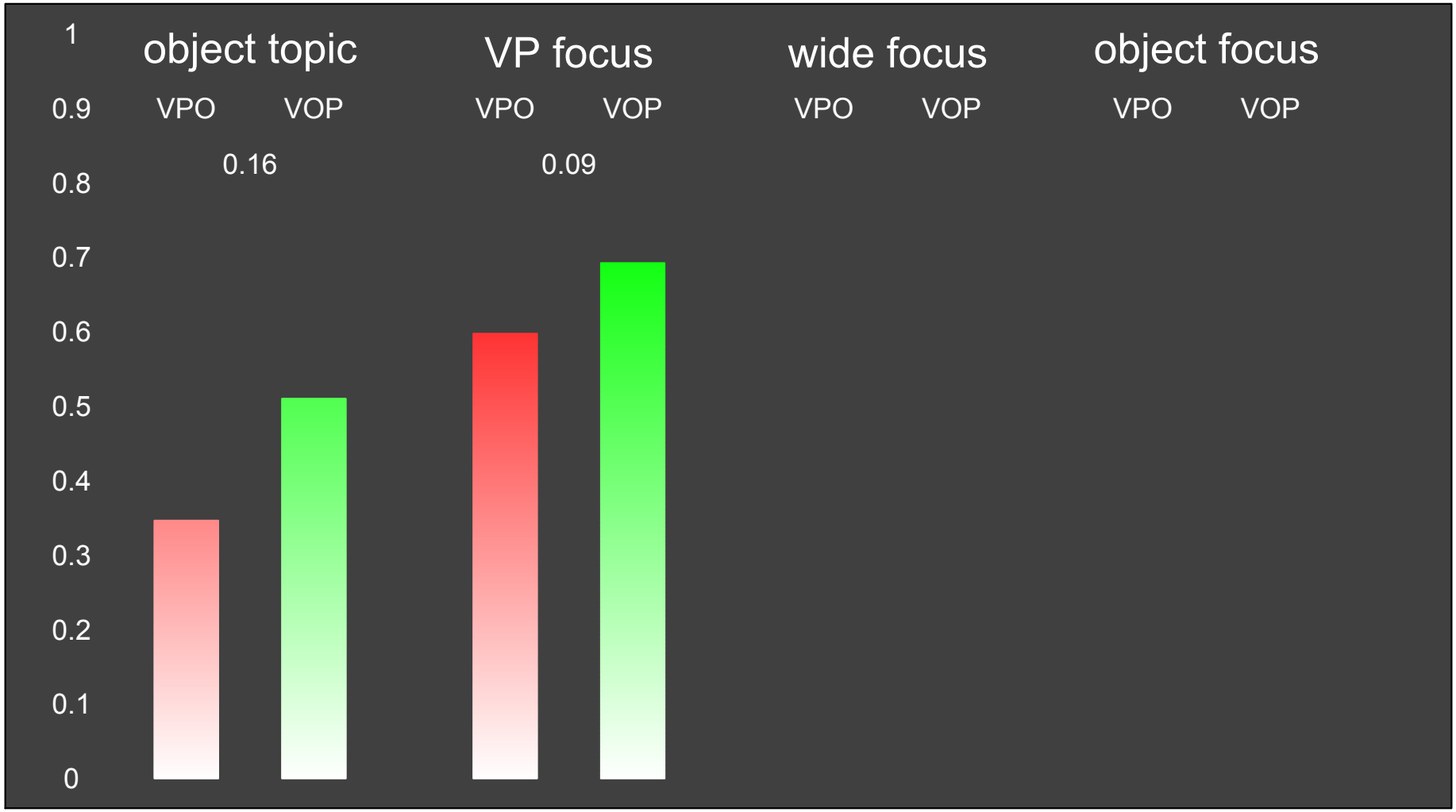

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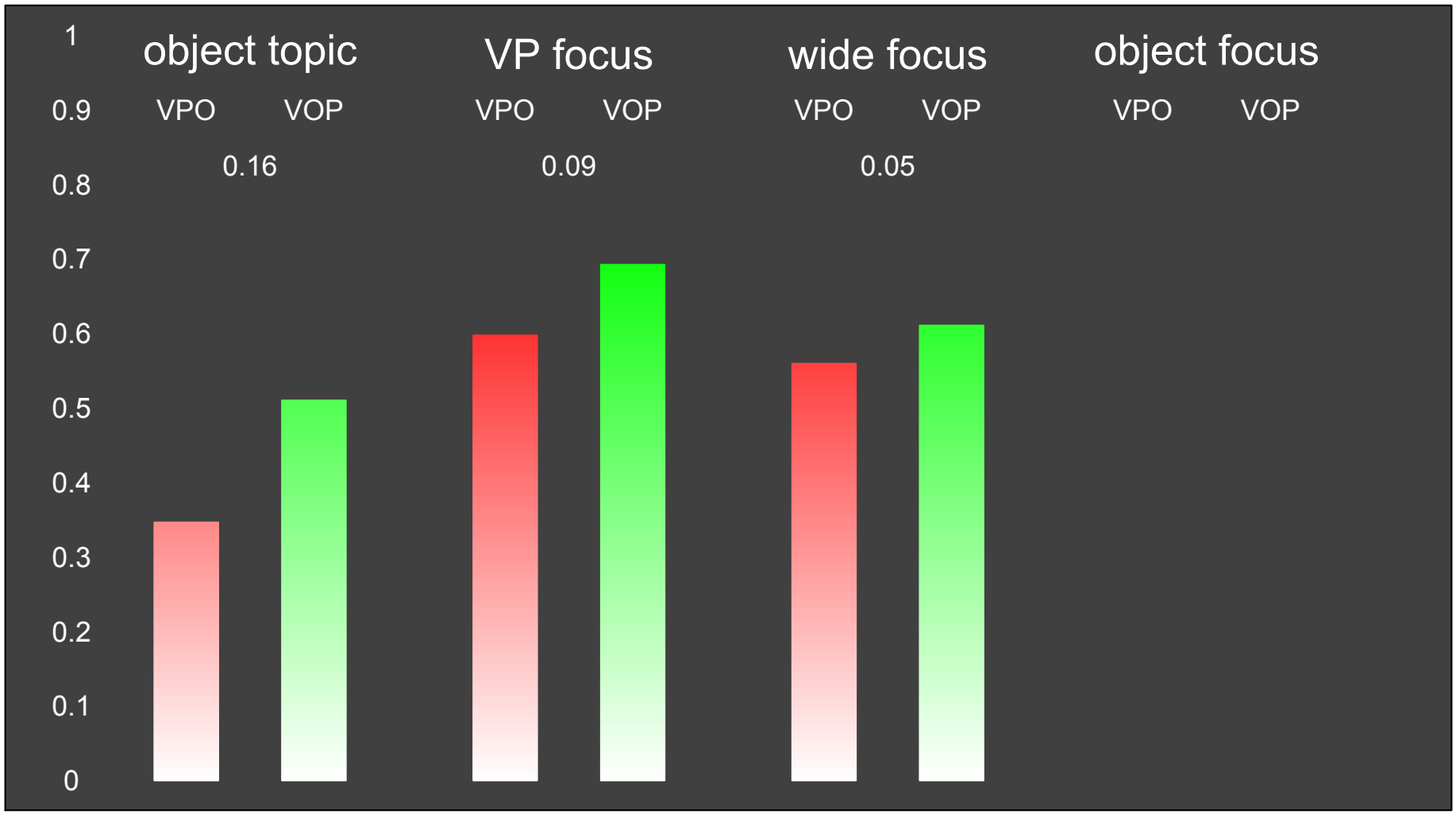

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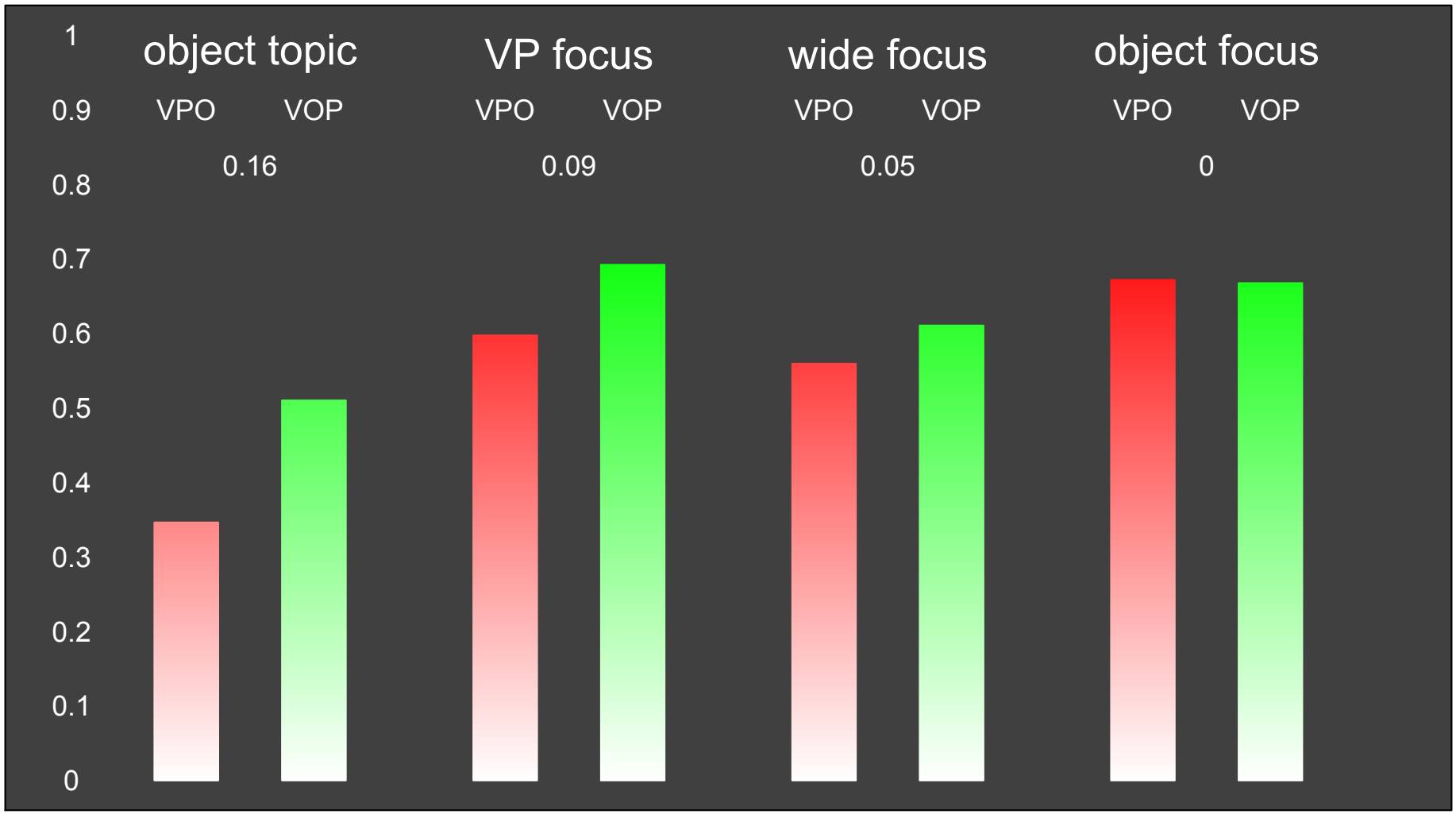

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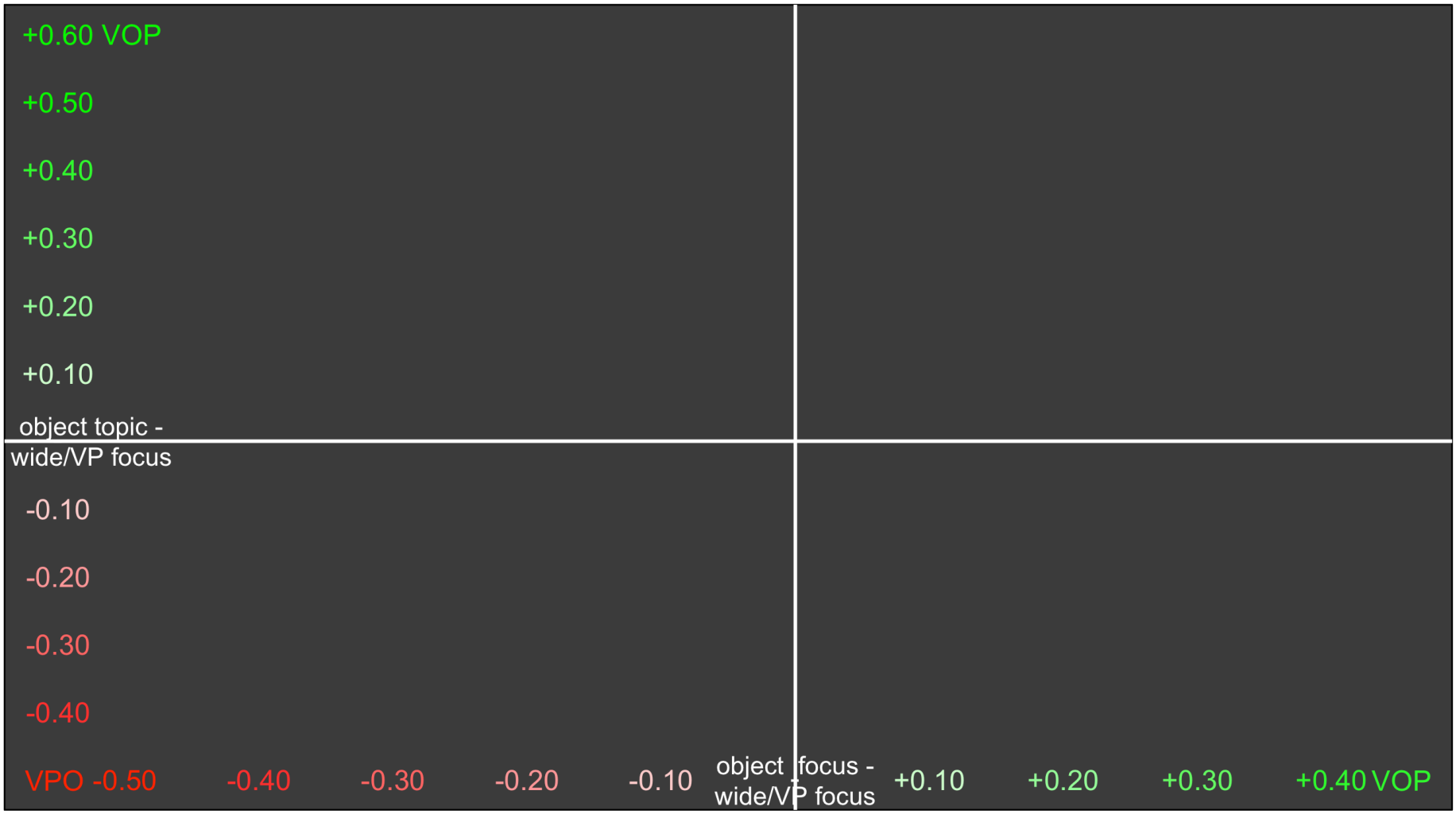

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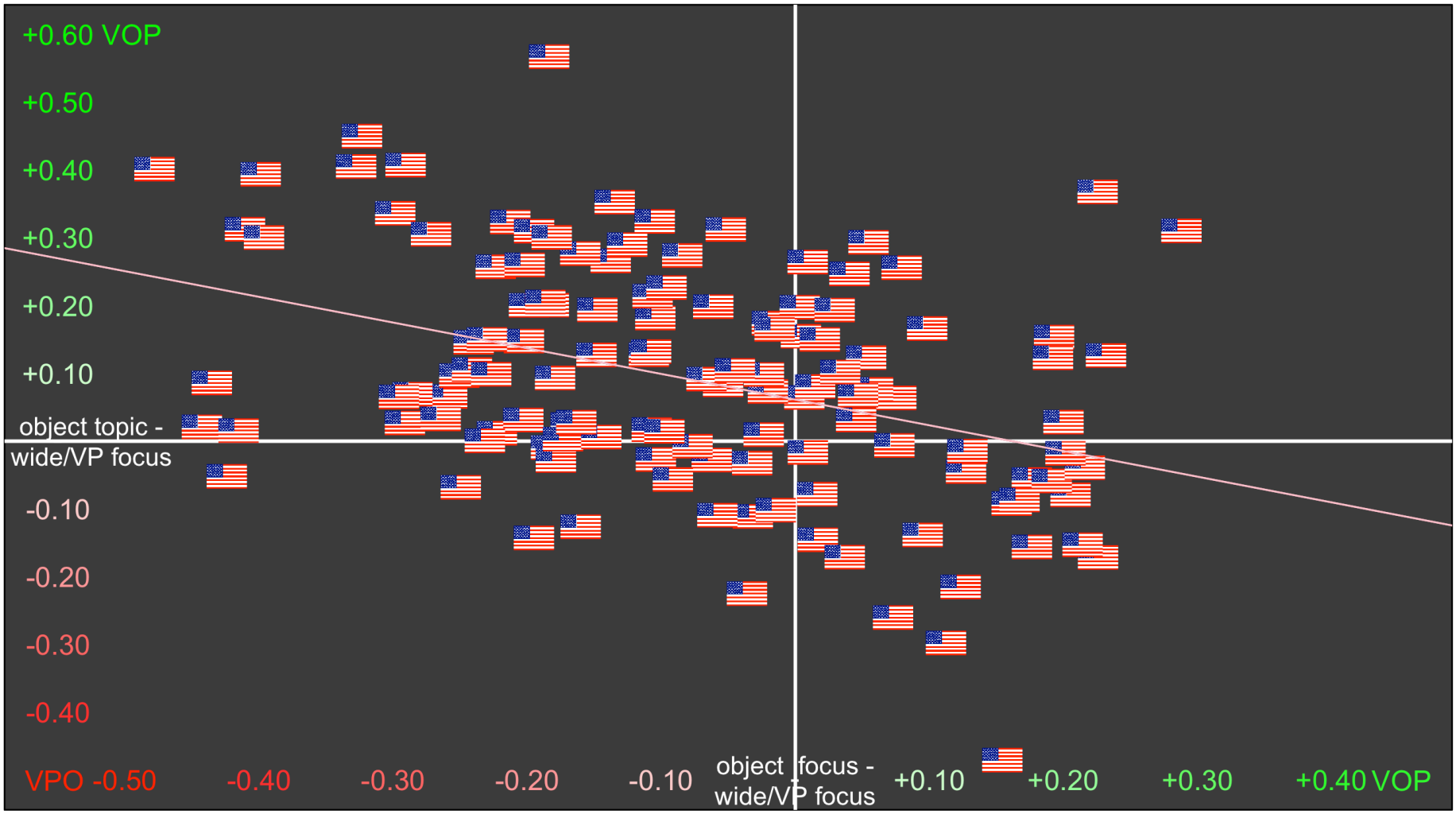

Experiment 2 – focus effects

r = -0.383
b = -0.379
p = 0.00001

Future Directions

- explore effects of frequency (of V, P, VP)

- test interaction between weight and topic/focus
- ***Head raising of the particle***

  [$_{PredP}$ P-p-Pred [$_{pP}$ OBJECT [$_{p'}$ P-p [$_{PP}$ P]]]]

- ***Old information object contexts***

  cut [$_{TopicP}$ [$_{DP}$ the tree]$_{[TOPIC]}$ [$_{Topic'}$ Topic [$_{PredP}$ [$_{DP}$ the tree] down]]]

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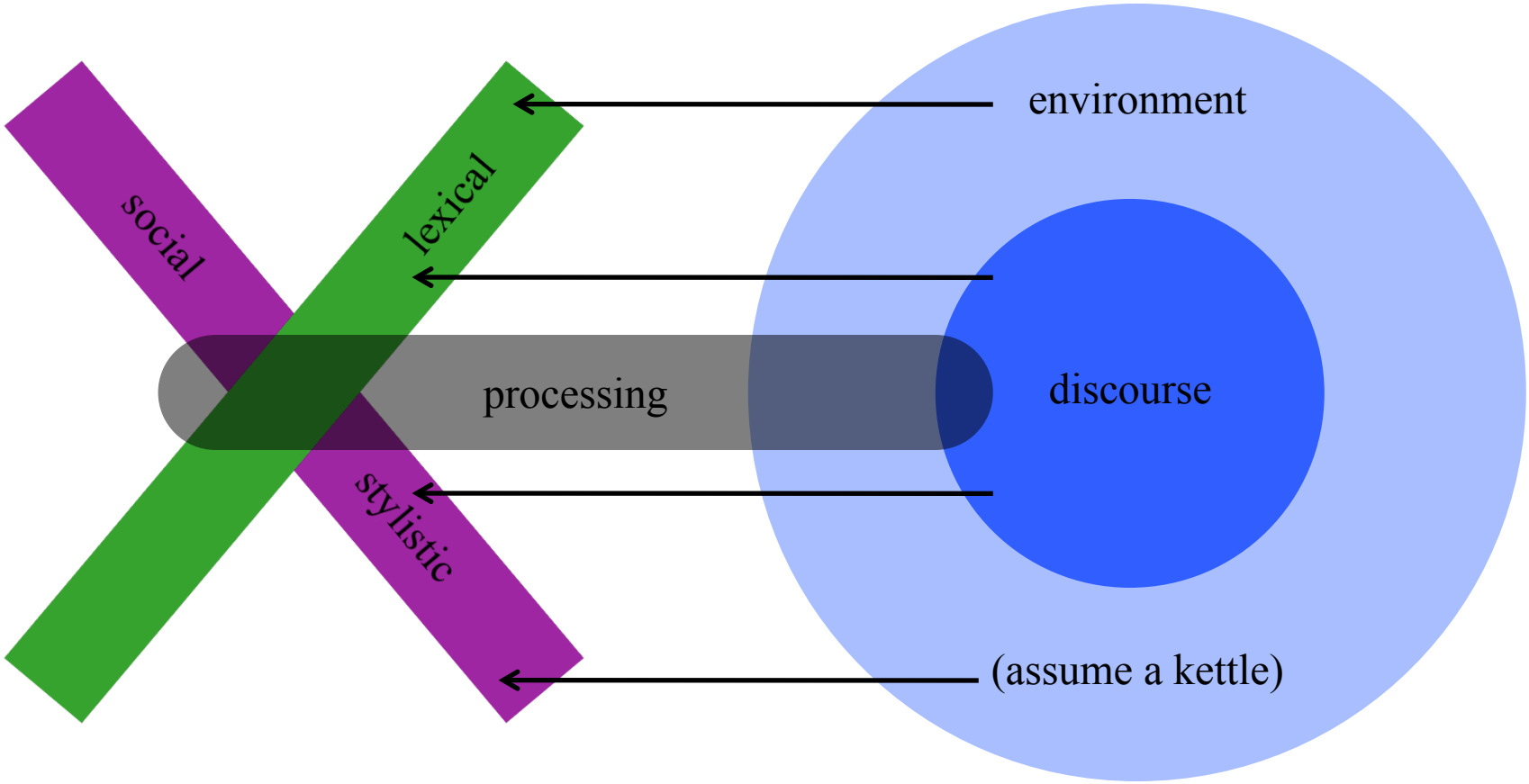
Variation in Grammar and Usage



adapted from Cappelle 2009