

Tracking speaker-specific standards across size and colour adjectives

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Adjectives like *tall* or *big* can apply differently across contexts, requiring listeners to infer what standard is relevant in a given situation. Prior research has largely treated scalar interpretations as depending on comparison classes, distributions of relevant properties in the environment, and general world knowledge [1–5]. However, listeners may also use linguistic cues to infer what a particular speaker counts as satisfying an adjective. Presuppositions and the compositional structure of adjective sequences may therefore shape listeners' beliefs about speaker-specific standards for adjective application. Previous work investigated this using a two-stage task in which participants interpreted a speaker's utterances and then inferred how many items that speaker would count as satisfying a property, revealing a robust effect of presupposition that was modulated by adjective order [6].

We replicated the original experiments in which either the size or colour adjective served as the dimension relevant for speaker-specific threshold accommodation, first using only 16 critical trials (size: $N = 396$; colour: $N = 398$) and then including the original 48 filler items (size: $N = 400$; colour: $N = 400$). In each trial, participants viewed a display paired with either a command or a question containing two adjectives in canonical or non-canonical order. Participants then selected or evaluated a target object accordingly. Commands presupposed that a borderline object satisfied the adjective, whereas questions did not. Participants then judged how many objects the speaker would count as satisfying the adjective in a second display (see Figures 1 and 2).

In the size datasets, commands increased inclusion of borderline items on Display 2 relative to questions both without fillers ($z = 2.58$, $p = .010$) and with fillers ($z = -5.35$, $p < .001$; see Figure 3). No reliable adjective-order effects or interactions were observed (see Figure 4). In the colour datasets, sentence type effects again emerged both without fillers ($z = 5.65$, $p < .001$) and with fillers ($z = -2.21$, $p = .027$). However, only the no-filler colour replication yielded a sentence type $\times$ adjective order interaction ($z = -2.13$, $p = .033$), which did not replicate in the filler version.

These findings suggest that listeners rapidly adjust scalar thresholds in a speaker-specific manner based on pragmatic cues such as presupposition and subsequently use these inferred standards in later categorization judgments. Crucially, this pattern generalized across both size and colour adjectives, indicating that speaker-specific threshold accommodation is not limited to adjective types canonically associated with scalar interpretation. In contrast to previous findings, the present replications did not provide consistent evidence that adjective order systematically modulates these inferences.

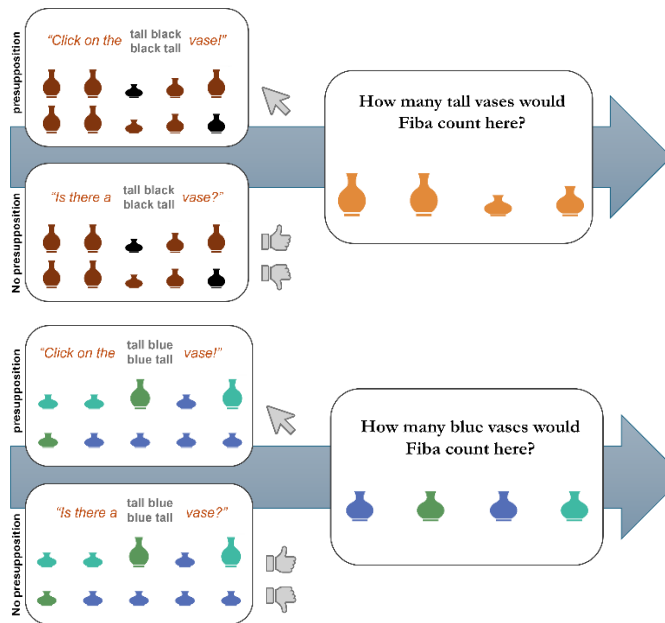


Figure 1 Trial structure – size version. In Display 1 (left), participants viewed an array paired with either a command or a question containing a size-colour adjective sequence. In Display 2 (right), participants judged how many objects the speaker would count as satisfying the adjective.

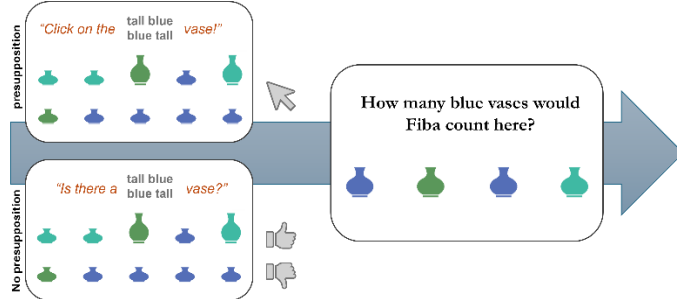


Figure 2 Trial structure – colour version. In Display 1 (left), participants viewed an array paired with either a command or a question containing a colour-size adjective sequence. In Display 2 (right), participants judged how many objects the speaker would count as satisfying the adjective.

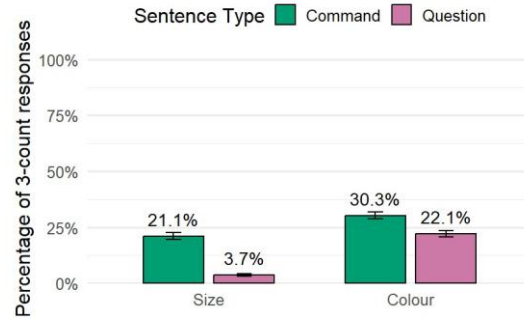
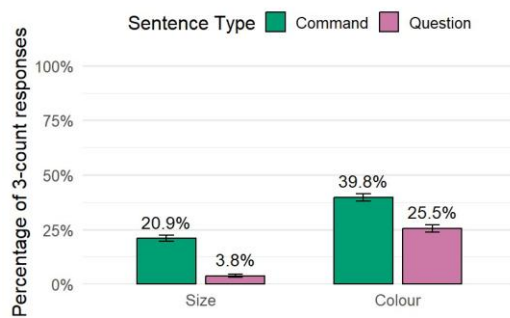


Figure 3 Display 2 inclusion rates (3-count responses) by sentence type and adjective dimension. Left: no-filler version. Right: filler version.

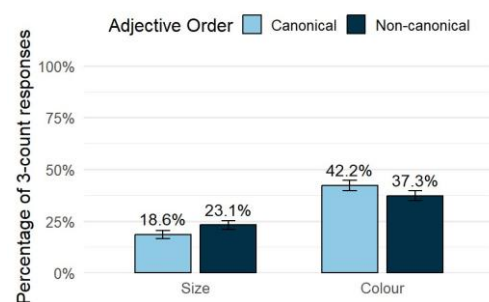
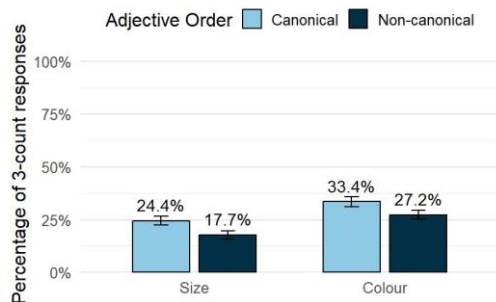


Figure 4 Display 2 inclusion rates (3-count responses) in command trials by adjective order and adjective dimension. Left: no-fillers version. Right: filler version.

References

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