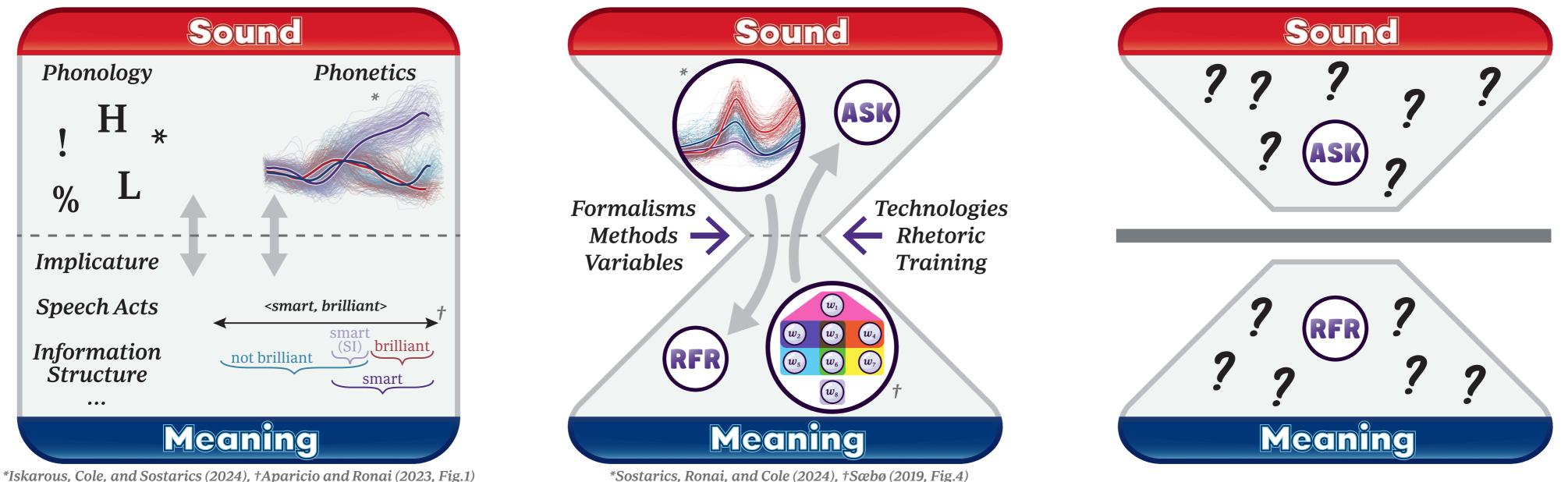
Intonation and its meaning: Beyond essential differences Jennifer Cole, Kate Sandberg, Thomas Sostarics, Rebekah Stanhope, Eszter Ronai Northwestern University, Department of Linguistics, jennifer.cole1@northwestern.edu

Introduction

Which properties of intonational **form** encode which **meaning** distinctions? Each domain has complex theories and analytic frameworks, but with little cross-talk, researchers in one domain rely on simplified "essential" differences in the other. This fundamentally limits the development of an explanatory theory.

Take-Homes

Our experiments testing pragmatic interpretation support category-level edge tone and durational form distinctions, with additional graded interpretative effects related to within-category phonetic variation. These findings are made possible by rejecting essentialism and embracing complexity in both domains.

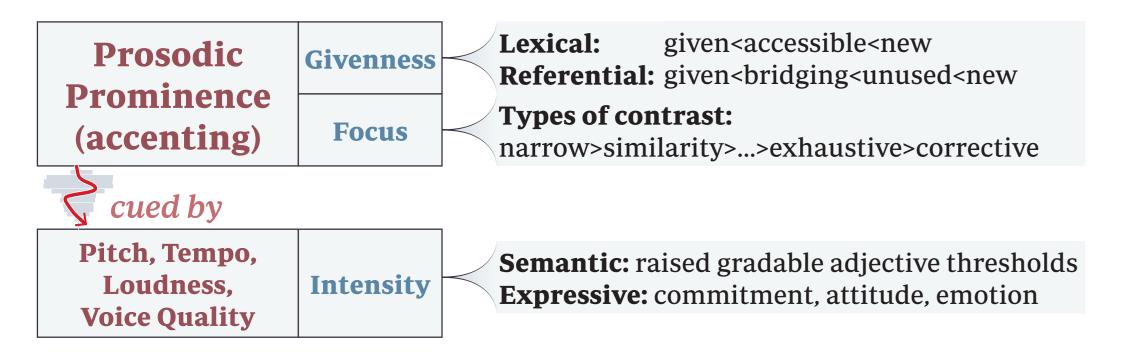


*Iskarous, Cole, and Sostarics (2024), †Aparicio and Ronai (2023, Fig.1)

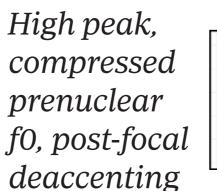
Contrastiveness versus Intensification

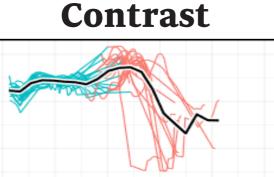
Prosodic prominence is associated with Information Structure through the location and tonal type of pitch accent.

The phonetic parameters associated with accents are also linked to **Semantic Intensity**. Are these the same type of prominence?

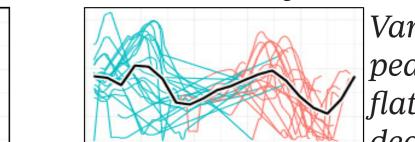


Take-away: Prominence effects on different acoustic parameters cue different kinds of pragmatically enriched meaning, distinguishing interpretations related to Information Structure vs. Intensity.





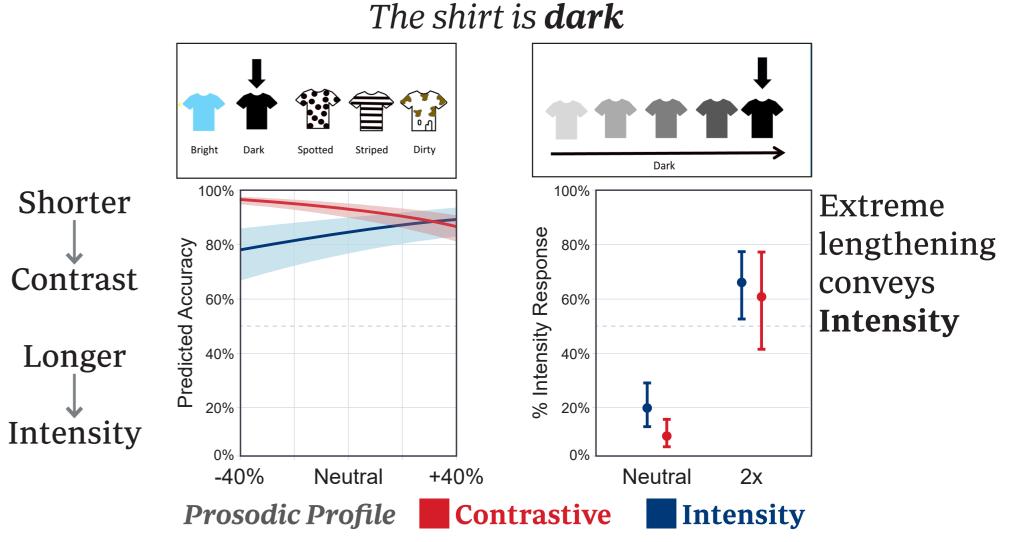
Intensity



Variable, high peak or low flat shape, no deaccenting

(Sandberg 2024, Ph.D. Thesis)

Which picture do you think the speaker was most likely looking at when they uttered this sentence?



0.36

Rise-Fall-Rise and Scalar Inference

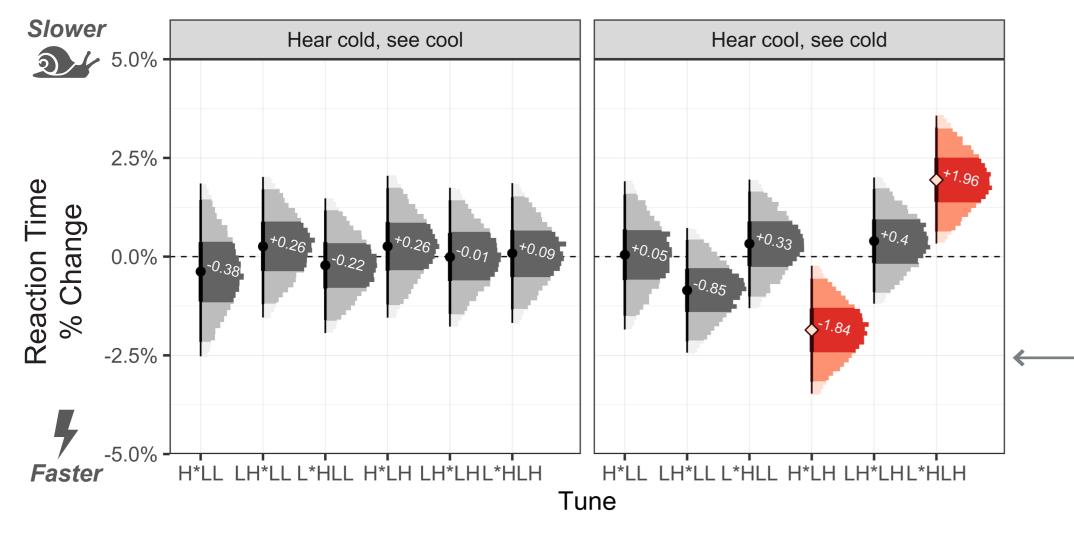
Pragmatics literature offers many competing proposals for how "the" rise-fall-rise tune interacts with higher alternatives. But AM theory predicts **three** RFR-shaped tunes that differ in the pitch accent used (H*, L+H*, L*+H).

Auditory materials with varied RFR and falling contours:



(Sostarics in progress, Ph.D. Thesis)

Do different functions map onto different RFRs, or does a similar function hold for a broad class of RFR tune shapes? We look at RFR through the lens of scalar inference (SI).

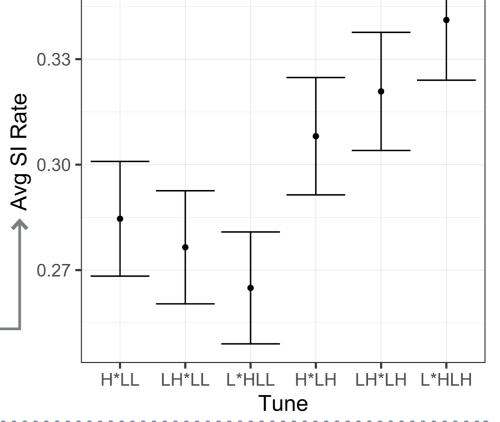


Q: Did someone leave a window open in the office overnight?

∧*RFR* A: The office feels **cool**

Would you conclude that the office does not feel cold?

Yes (SI: *cool* but not *cold*) No (SI not calculated)



Take-away: RFRs overall encourage SI calculation relative to falls, suggesting a broad class of RFRs with small graded distinctions.

In priming with lexical decsion, RFR shows an asymmetry when probing a higher (*cold*) or lower (*cool*) alternative. The RFR with the smallest pitch range shows additional facilitation for cold, but the RFR with the largest pitch range leads to **less** facilitation.