The influence of expertise and individual differences on psychological embeddings
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BACKGROUND
PsiZ (Roads & Mozer, 2019): A novel technique for inferring psychological embeddings (rich multidimensional similarity spaces) from behavioral similarity judgements.

Can we measure the effects of individual differences (particularly expertise) on perception, categorization, and psychological embeddings using PsiZ?

Judgments of NBA players by experts, fans & novices

Judgments of kanji by Japanese and English readers

Judgments of musical artists

Billie Marten
Kendrick Lamar
Tim McGraw
Ed Sheeran
Olivia Rodrigo

Emotions revealed that experts showed conceptual category structure, fans/novices showed perceptual category structure.

Emotions captured subtle differences in Japanese participants’ relative use of conceptual/perceptual strategies.

Embeddings reflect participants’ ‘islands of knowledge’ and familiarity (or lack thereof) with different genres and artists.