Valuing dissimilarity: The role of diversity on preference predictions

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Abstract
How do people integrate others’ opinions when predicting their own tastes? Previous research suggests decision-makers generally prefer to seek and accept advice from similar others. We explored whether and when people value preference diversity among advisors. Participants predicted how much they would enjoy unfamiliar stimuli (e.g., movies) based on the ratings of similar and dissimilar reviewer pairs. When self-relevant similarity information was available, people were largely insensitive to diversity. But, when more general preferences and inferences are at play, such as predictions about something’s objective quality, they often gave more positive weight to opinions from dissimilar (vs. similar) reviewers.

Similarity & Diversity
- People turn to similar others for lots of reasons, including social comparison [1], advice taking [8], and sticking to a “birds of a feather” status quo [6].
- When people value dissimilar others is less studied [2, 3].
- The “diversity principle” in category-based induction [4, 5, 7], however, says arguments supported by dissimilar premises are stronger than arguments supported by similar ones.

<table>
<thead>
<tr>
<th>Argument A</th>
<th>Argument B</th>
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<tbody>
<tr>
<td>Hippos have condyloid canals.</td>
<td>Hippos have condyloid canals.</td>
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<tr>
<td>Rhinos have condyloid canals.</td>
<td>Hamsters have condyloid canals.</td>
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<tr>
<td>Mammals have condyloid canals.</td>
<td>Mammals have condyloid canals.</td>
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Similar premises ⇒ weaker argument
Diverse premises ⇒ stronger argument

Do people care about diversity when predicting their preferences (e.g., “Will I like this movie?”) as they do when predicting their beliefs (e.g., “Does a sea cucumber have condyloid canals?”)?

Study 1: Open-Ended Reasoning
If you knew:
Reviewer A, who agrees with you 80% of the time about movies, rated Movie X a 9 out of 10.
Reviewer B, who agrees with you 20% of the time about movies, rated Movie X a 9 out of 10.

...how would you reason about your likelihood of enjoying Movie X?

Study 2a: Movie Predictions

**Similarity**
- Rev. A overlaps 80% with your tastes.
- Rev. B overlaps 80% with your tastes.

**Dissimilarity**
- Rev. A overlaps 20% with your tastes.
- Rev. B overlaps 20% with your tastes.

**Similarity**
- Rev. A overlaps 80% with your tastes.
- Rev. B overlaps 80% with Rev. A’s ratings.

**Dissimilarity**
- Rev. A overlaps 20% with your tastes.
- Rev. B overlaps 20% with Rev. A’s ratings.

Given congruent positive opinions from diverse advisors, more people used dissimilarity as a positive cue for predicting their own preferences—at least, when asked to explicitly reflect on their reasoning process.

Study 2b: Updating Beliefs
- Sequential presentation of congruent opinions
- How much would you like the movie after seeing Rev. A, then Rev. B (1-10)?

When predicting their preferences based on pairs of individuals who shared or didn’t share their own tastes, people did not value diversity over similarity. They valued it even less when sampling opinions sequentially.†

†This pattern held across several replications using different samples (lab, Mturk), stimulus categories (movies, songs), and judgment frames (preference magnitude vs. probability ratings).

Study 3: Need for Uniqueness
- Absent self-relevant similarity information
- Inter-reviewer diversity: overlap in movie tastes

<table>
<thead>
<tr>
<th>Similar pair</th>
<th>Dissimilar pair</th>
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<tbody>
<tr>
<td>A 80%</td>
<td>B 20%</td>
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</table>

Reviewers A and B both like Movie X.

Study 4: Quality Inferences

**Comparison of similar vs. dissimilar pairs (no self)**
- How would most critics rate the movie? (1-7)

When people made inferences about more general features of target stimuli like critical appeal and objective quality, they valued diverse opinions more.

Conclusions
- People don’t tend to value diversity with respect to their own preferences, but do seem to when:
  - Reflecting on their reasoning about diverse opinions
  - Individual need for uniqueness is lower
  - Predicting something’s general quality and appeal

- This raises the question: Are we more likely to respect diversity when we perceive choices within categories as matters of quality (vs. taste)?

Select References

Questions/feedback welcome! Contact: Rachel Meng at rm3081@columbia.edu