Publication preferences reveal structural diversity of academic fields

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Extended Abstract

"Publish or perish" the saying goes. But where? Each choice of venue reflects topic, personal preference, disciplinary norms, aspirations, and institutional incentives, reinforcing hierarchies of prestige. But the value of publishing in a particular venue is collectively constructed: a "top-tier" venue in one field might be considered peripheral in another, and academics often differ in their preferences for balancing prestige, potential impact, target audience, and cost.

Unfortunately, exploring these phenomena has remained difficult because existing bibliographic data mix preferences with the ability to successfully realize those preferences. Aiming to directly measure preferences themselves, we developed an online survey platform called *Publish or Comparish* (CU Boulder IRB 23-0454). Each respondent selects a set of publication venues they would like to publish in, and then they are presented with pairs of venues from that set and must choose their preferred option. This produces both a set of journals each respondent aspires to publish in and quantitative preference estimates. With 3,601 total participants, we sampled more than 100 participants from each of 13 fields. By integrating pairwise comparison data with journal impact factors (JIFs) [1], participant career stages, fields, publication records, and institutional prestige [2], we constructed a nuanced account of publication preferences. All responses were collected with informed consent, anonymized, and stored securely, with reporting limited to aggregate patterns to protect individual privacy.

Preferences are highly concentrated among a small number of venues, with 80% of all selections accounted for by only 16.05% unique venues. Nevertheless, this overall concentration hides substantial variation between fields. Fig.1A summarizes this diversity through venue accumulation curves: given the responses within each field, as more participants are randomly sampled, the average cumulative number of unique venues increases far more quickly in Computer Science than in Economics. This pattern is confirmed in Fig. 1B, which shows within-field overlap, which is highest in Economics (44%) and lowest Computer Science (8%). Fig. 1C shows the percentage of participants who selected the top three most popular venues per field. For example, 96% of economists in our sample selected *American Economic Review*, but only 50% of computer scientists selected *Communications of the ACM*, each being the most selected venue in those respective fields. Fig. 1D visualizes preference networks, showing the interplay between venue diversity and preference patterns.

To examine how participants' career stage, gender, and institutional prestige interact with venue preferences, we conducted a linear regression analysis assessing their relationship with the rankings inferred from respondents' pairwise comparisons of venues. We find that participants at more prestigious institutions both *aspire* and *are able* to publish in venues that are more highly ranked in both overall and field-level rankings, and they tend to rank these venues higher in their individual rankings. In full, this analysis provides a robust account of publication preferences, their structure, and how other dimensions of academia both shape and are shaped by these preferences.

Our findings build on prior work examining the role of publication venues in shaping scientific discourse [3, 4], while also extending beyond traditional approaches that rely on fixed journal rankings (e.g. [5]). By leveraging pairwise comparisons, we allow preference structures to emerge directly from participant responses, offering a more flexible and nuanced perspective on how academics navigate the publishing landscape. We examine structural patterns in publication preferences not to evaluate or rank individuals, but to examine how they interact with other hierarchies within academia. This work contributes to a broader understanding of how scientific knowledge is organized and valued.

References

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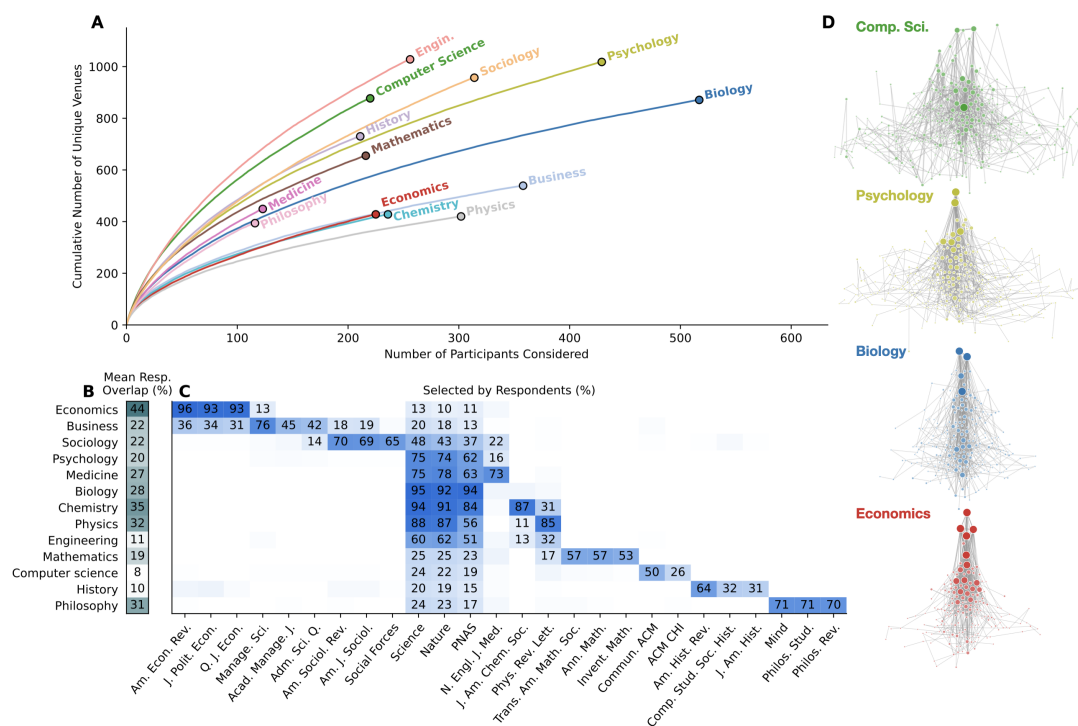

Figure 1: **Fields vary widely in the diversity of their consideration sets and consensus around common venues.** (A) Venue accumulation curves show the growing number of unique venues among the combined consideration sets of an increasing number of respondents, sampled without replacement for each field and averaged over 100 realizations. (C) Within-field overlap quantified as the average percentage of participants in one field that have selected venues chosen by others in their field. (D) The percentage of participants in each field that selected each of the three most commonly selected venues in each field. (D) Preference network sketches for four selected fields depict variation in consideration set and preference similarity by field, derived from 50 randomly chosen respondents in each field. Venues (circles) are sized by popularity and vertically positioned by field consensus ranks, while links (lines) are drawn to connect each respondent's ranked venues in preference order.