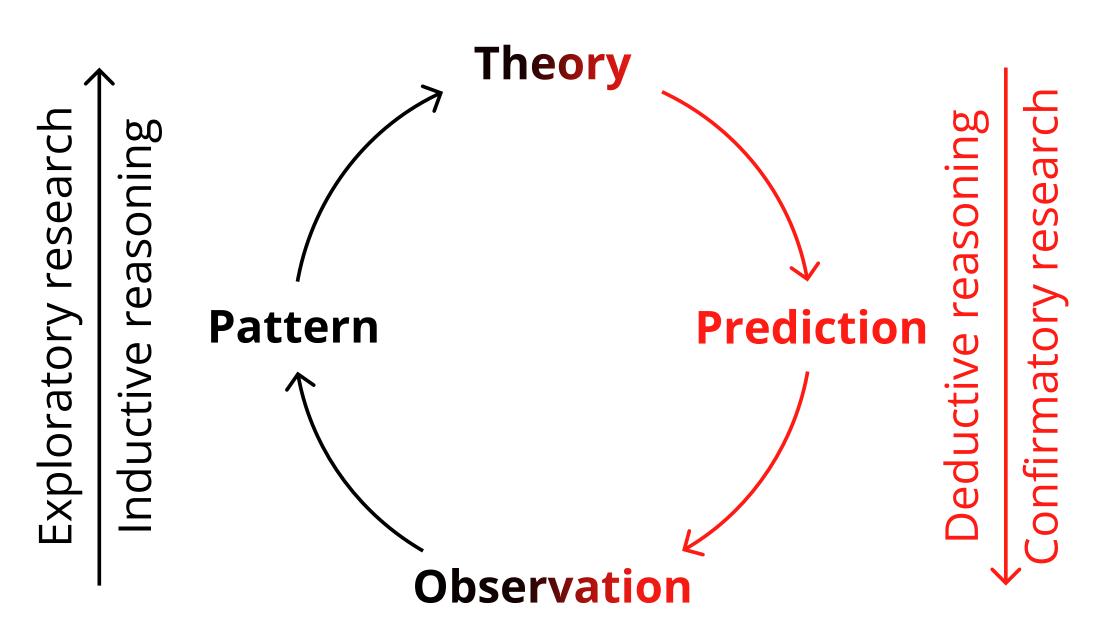
Our objective is to evaluate the theory of code review as communication network.



If code review is a communication network, information spreads across social, organizational, and architectural boundaries.

We approximate this information diffusion in code review at Spotify by measuring the similarity of participants, affected components, and involved teams of linked code reviews using

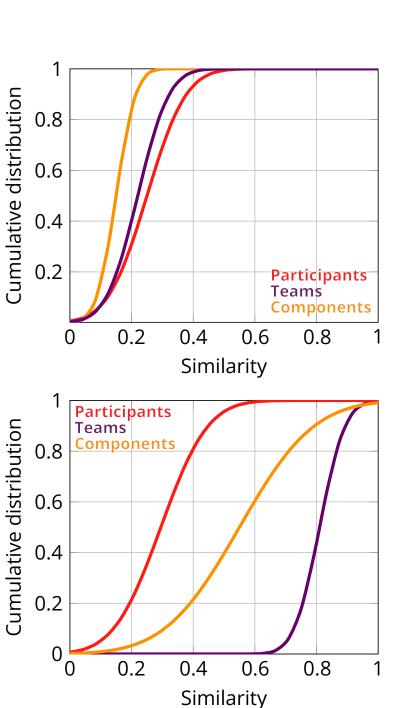
 Jaccard index for participants and teams



 Graph edit distance for components FOR GRAPHS

LEVENSHTEIN DISTANCE

We evaluate the theory based on an indepth discussion of our observations rather than statistical tests:



0.2 0.4 0.6 0.8

Similarity

0.2

Significant dissimilarity across all dimensions (participants, teams, components) between linked code reviews suggests that information diffuses across all boundaries.

> → Theory is corroborated (cannot be falsified)

Significant dissimilarity among participants with a strong similarity between the **teams** involved suggests that information spreads more within teams than between them.

> → Theory can be falsified in its universality

High similarity across all three dimensions (participants, teams, components) indicates limited information diffusion between them.

→ Theory can be falsified

REGISTERED REPORT

Measuring Information Diffusion in Code Review at Spotlity

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