

One path or many?

Policy development and diffusion across Wikipedia language editions

Zhaozhi Li, Political science, Washington University in St. Louis

Julia Wagner, Economics, ETH Zürich

Weijun Yuan, Sociology, University of California, Irvine

Seth Frey, Communication, University of California, Davis

Benjamin Mako Hill, Communication, University of Washington

Wikimania 2023

16-19 August 2023, Singapore

Rationale

Drives for self-governance

- Environmental and resource constraints
- Errors and lessons of community members

Striking diversity and consonances in how different communities solve the same problem

- Difficult to predict when a set of institutions will converge on identical or divergent solutions to the same governance challenge (Ostrom, 2005)

Research Questions

- Will organizations facing a similar set of challenges build similar sets of rules?
- When they converge on similar solutions, do they follow the same path to get there?
- How much does their policy development depend on group size? On culture?

Zhaozhi Li, Weijun Yuan, Julia Wagner, Seth Frey, Mako Hill



Wikipedia editions as collective action institutions

Wikipedia

- Free online encyclopedia with editions in 316 languages
- Hosted by a common umbrella organization, the Wikimedia Foundation
- Common physical server infrastructure
- Each is peer produced and self-governing
- Users write the rules, coded by languages

A productive platform for studying policy processes

- Highly comparable collective action institutions
- Open community-driven structure
- Pursuing the same mission under the same constraints
- Policy diffusion across Wikipedia language editions

Zhaozhi Li, Weijun Yuan, Julia Wagner, Seth Frey, Mako Hill



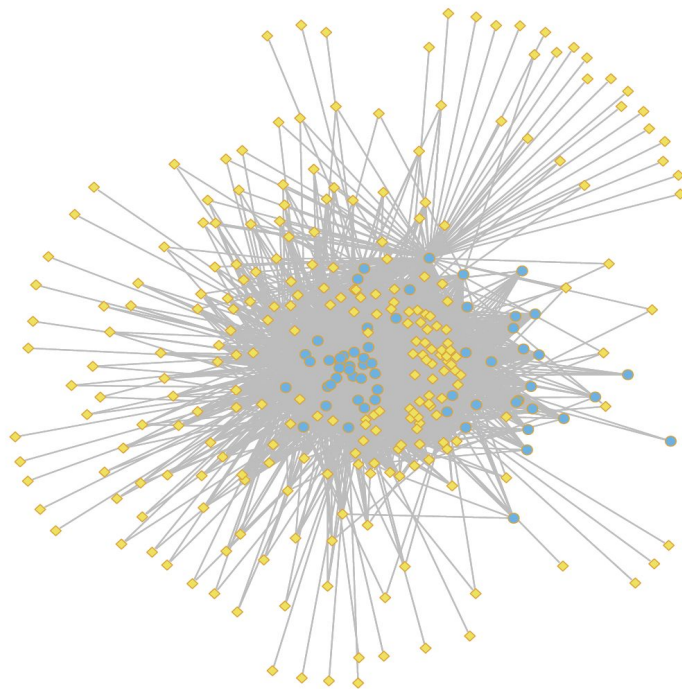
Cross-edition policy structure

Data

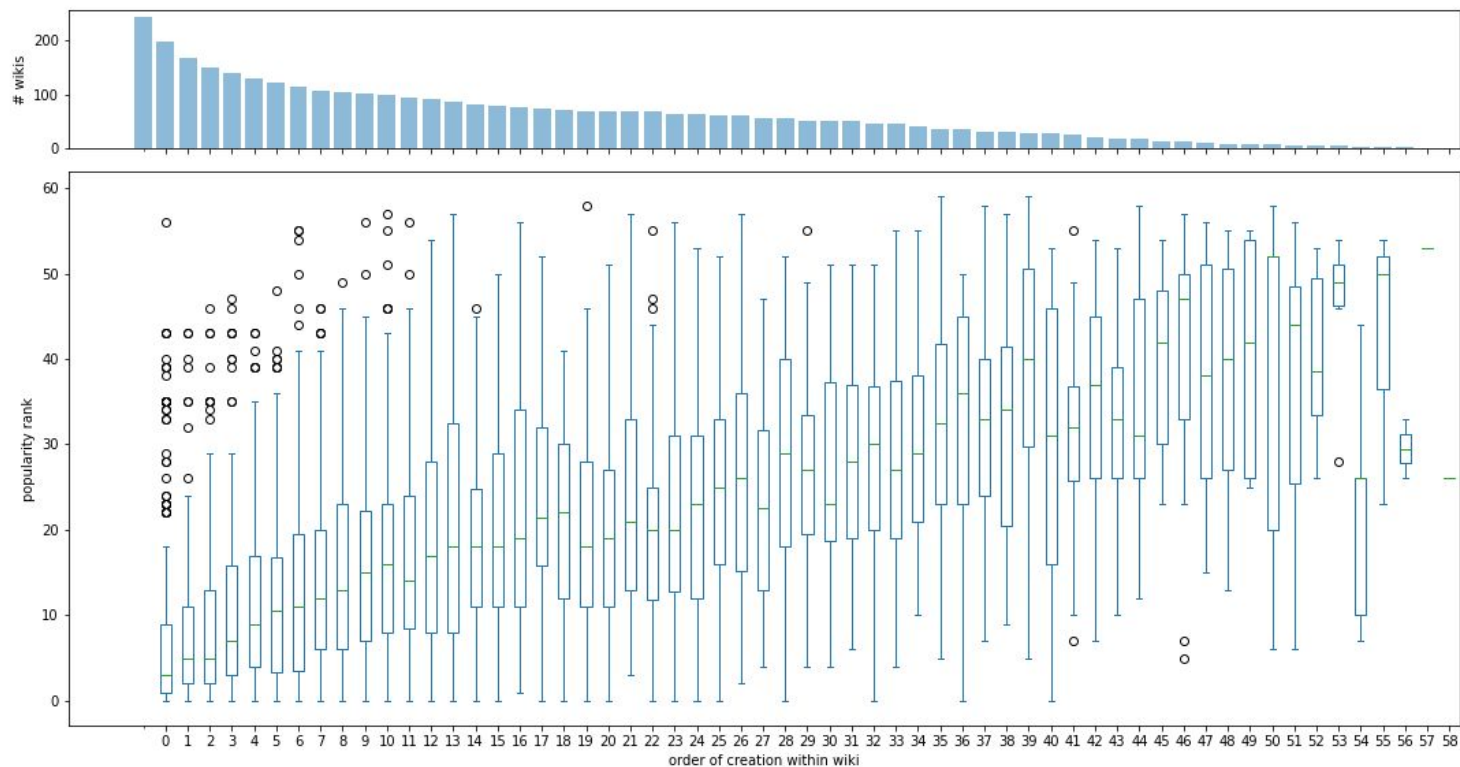
- WikiData
- MediaWiki's cross-wiki linking pages

The language-policy bipartite network

- 60 shared policies and 245 language editions
- 3611 instances of policy adoption (language-policy ties)



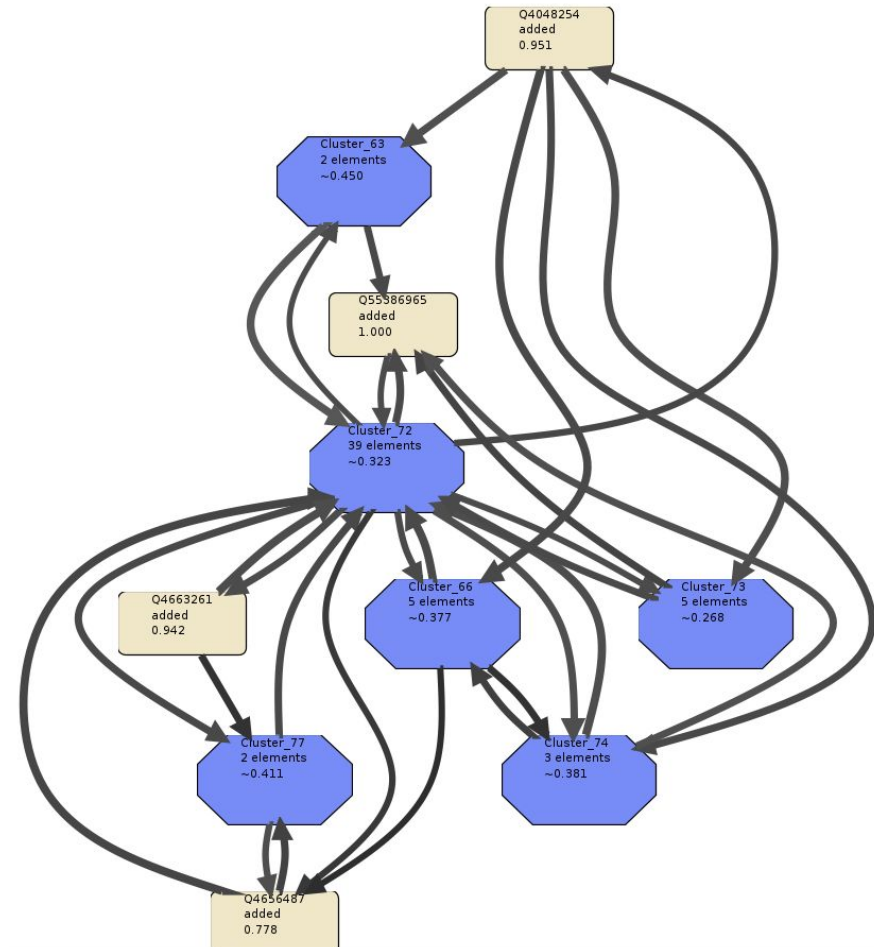
Result 2: Popularity drives order of adoption



Zhaozhi Li, Weijun Yuan, Julia Wagner, Seth Frey, Mako Hill

Result 3: shared, but noisy, developmental path

- Sequence clustering analysis
- Variation around **a relatively strong policy adoption sequence**
- Implications:
 - Generally a common path
 - Shared constraints (e.g., resource limits, shared mission, constitutional structure) may play a larger role than edition-specific constraints



Conclusion

Wikipedia provides a rare case of highly comparable policy systems developing in parallel, enabling us to test theories of policy development.

- Policies are widely shared among different language editions
- Little evidence of policy adoption based on cultural traditions
- Policy adoption driven by popularity
- A single developmental path



Future Directions

- Include not only shared policies
- The content of the policy
- Generalizability of policy adoption on Wikipedia
- Mechanisms for the single developmental ladder

