One path or many?
Policy development and diffusion across Wikipedia language editions

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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?
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

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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)

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Result 1: Policy sharing patterns

Who shares how many policies with whom?

- One-mode projection of the policy-language network
- Nodes: Wiki language editions
- Edges: weighted by # shared policies

Results

- Core: 30 fully connected language editions sharing at least 37 policies with one another
- The English edition has adopted nearly all of the policies that are shared across editions.
- No evidence of clustering based on cultural traditions

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Result 2: Popularity drives order of adoption
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