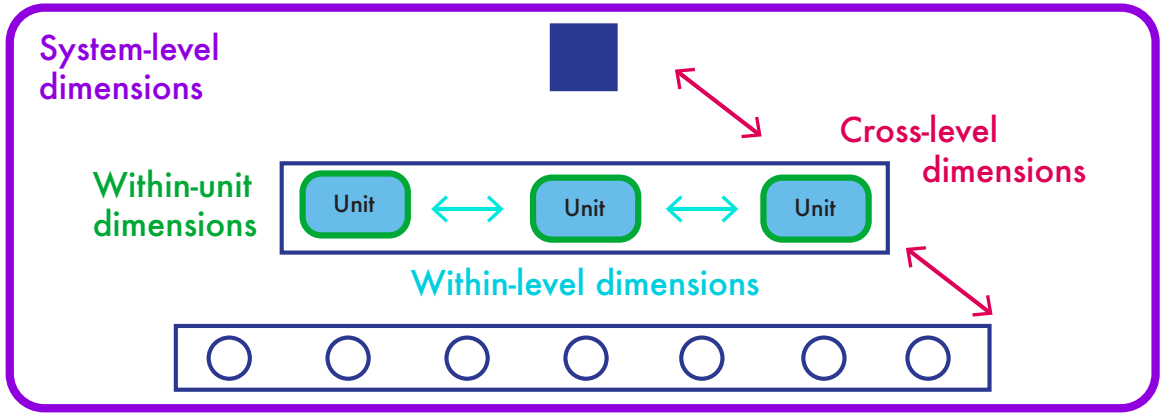
Decentralizing Platform Power

A Design Space of Multi-level Governance in Online Social Platforms



Presented by
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Caution: disturbing content

Will You Allow This On Your Site?

Platform Governance

Facebook's Internal Rulebook for Platform Governance

Build a foundation for designing
transparent and effective platform governance

Background

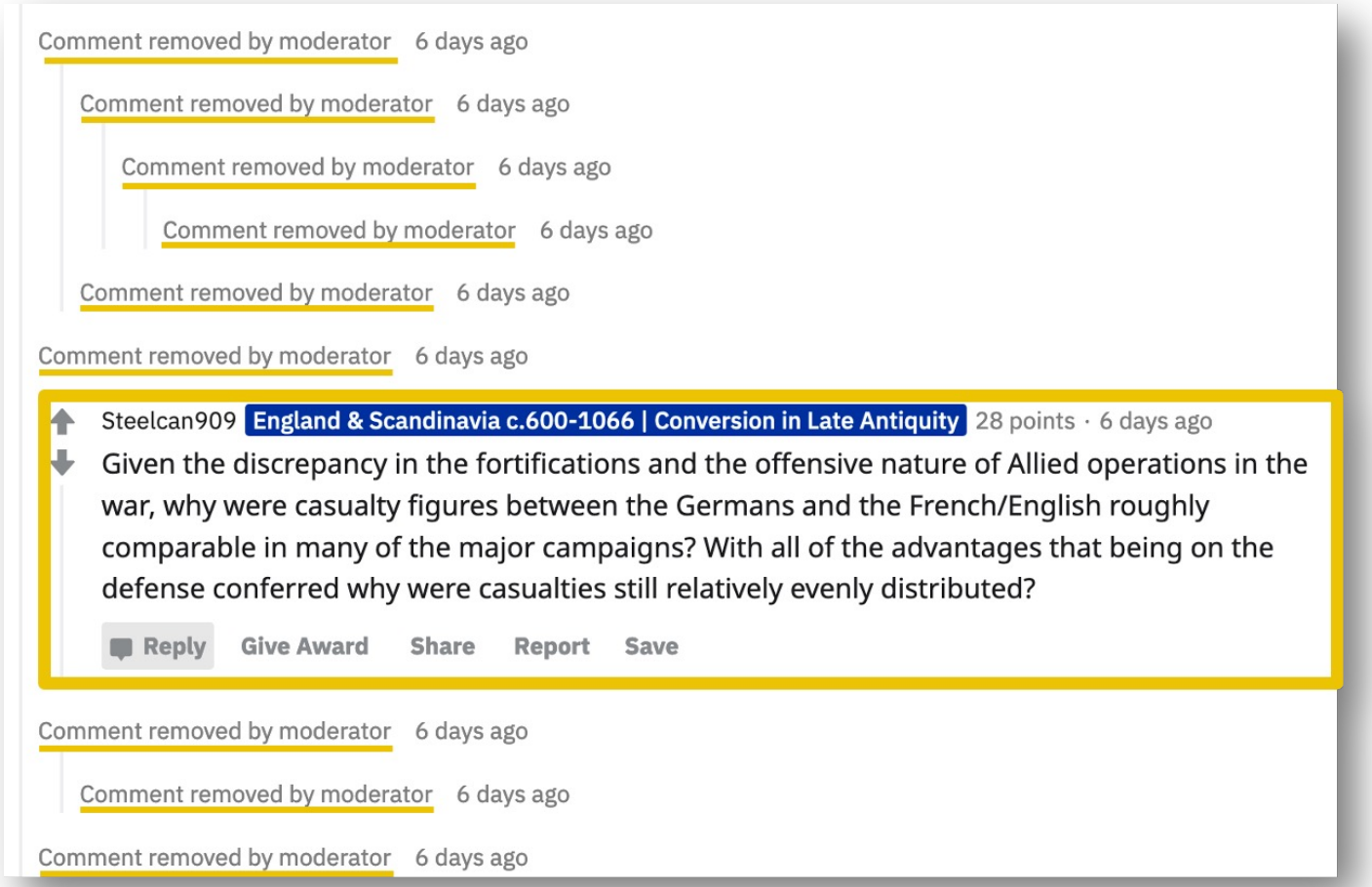
What is Platform Governance?

- Organized practice of screening user-generated content posted to Internet sites in order to determine its appropriateness for that site (Roberts 2017)

- Complex sociotechnical systems
  - Admins
  - Community guidelines
  - Moderators
  - Moderation bots
  - Users

Roberts, Sarah (2017) Content Moderation. Encyclopedia of Big Data.

It helps users find relevant information



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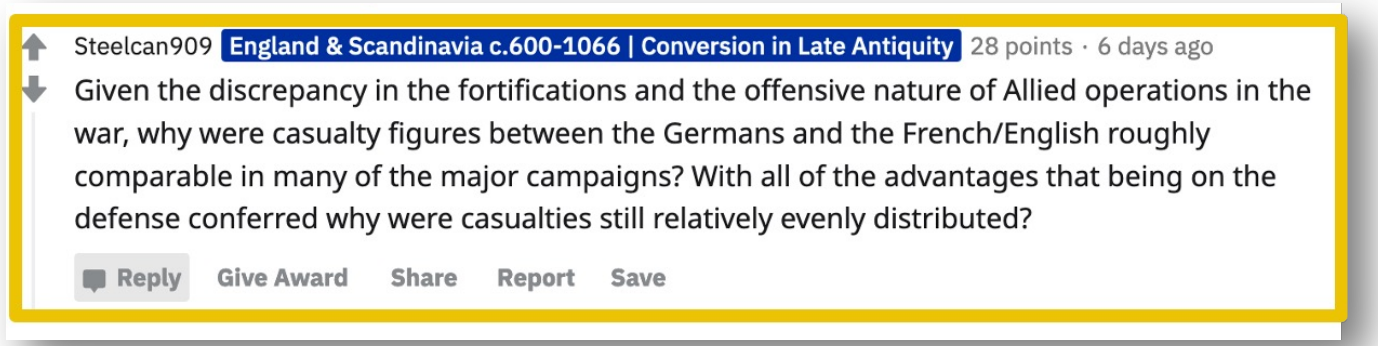
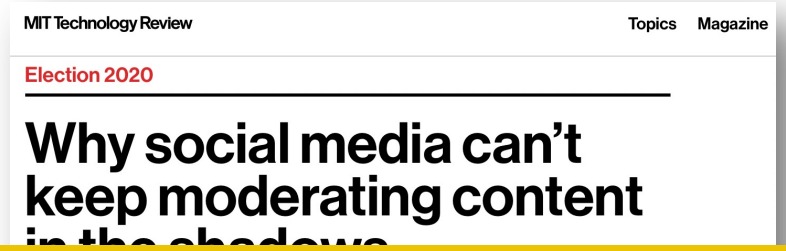


It addresses key problems on the internet

It shapes who gets heard

Platform Governance is broken

Lack of Transparency



Online Hate Groups

Urgent need to address these failures

Approach

- Understand the governance needs, perspectives, and practices of end-users
  - Nuances of online harms and how to address them
- Examine the structural and functional aspects of platform governance
  - Governance labor, automation, and constraints
- Study how users behave in response to governance actions
  - Theory of governance interventions

Data Collection Methods

- Surveys
- Experiments
- Interviews
- Participant observation
- User activity logs
- Literature reviews

Theories Drawn From

- Social psychology
- Political science
- Economics
- Communication studies
- Library science
- Human-computer interaction

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Citation: **Shagun Jhaver**, Seth Frey, and Amy X. Zhang (2023), "Decentralizing Platform Power: A Design Space of Multi-level Governance in Online Social Platforms," *Social Media + Society*, 9(4). DOI: 10.1177/20563051231207857

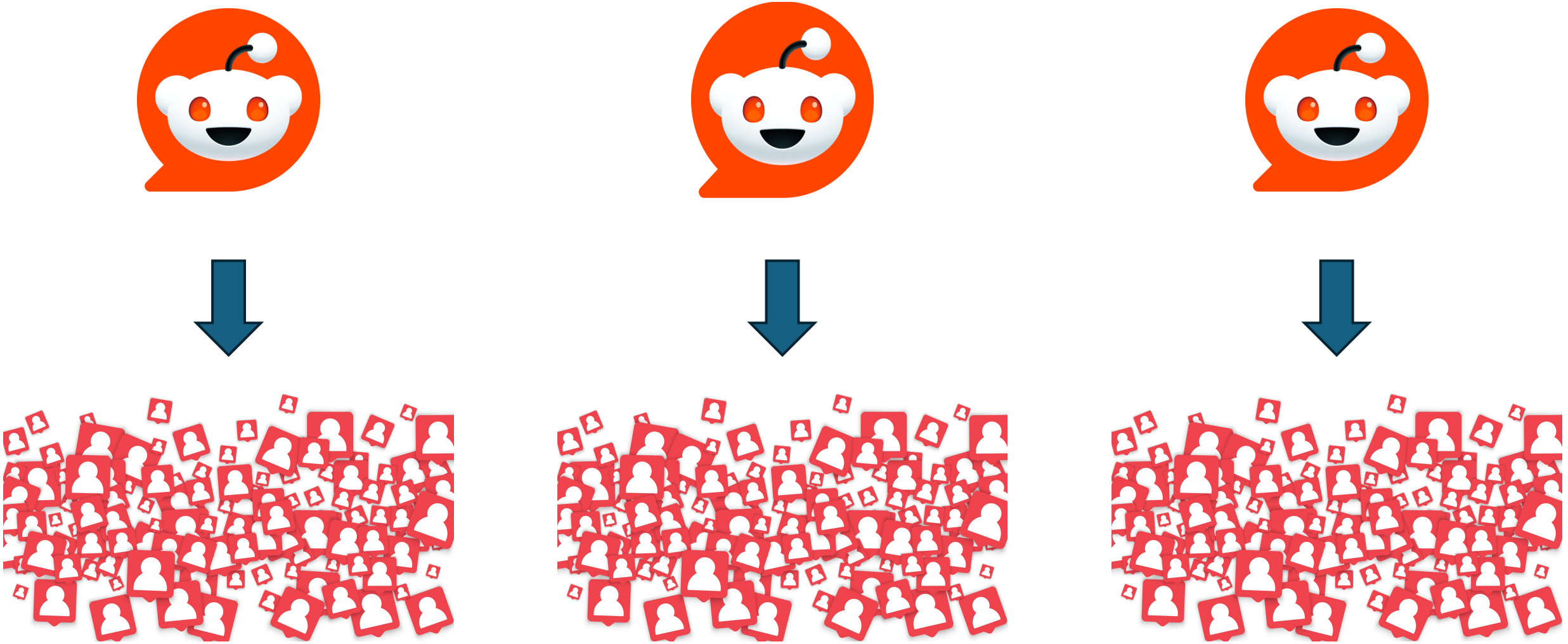
Exodus from Twitter

Which platform to move to?

Governance Design

Twitter is Centrally Governed

Contrast: Reddit

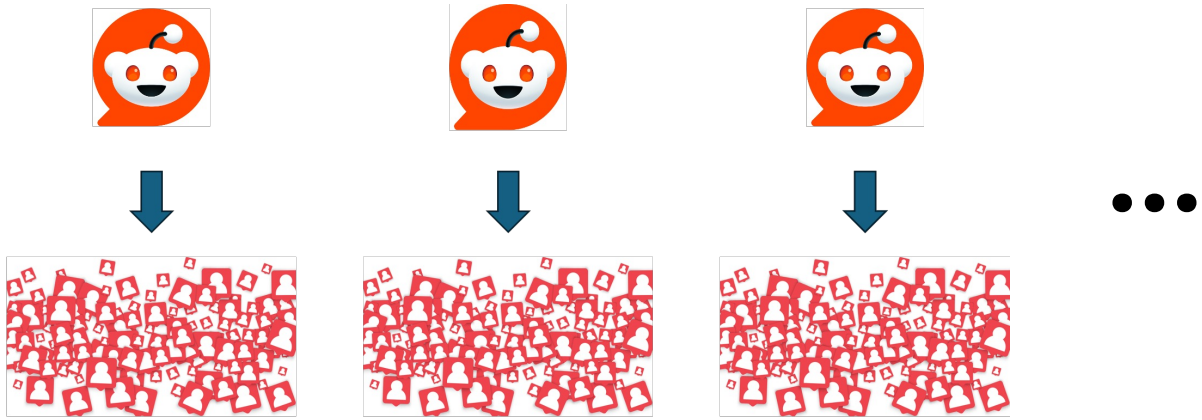


Reddit has a Decentralized Governance

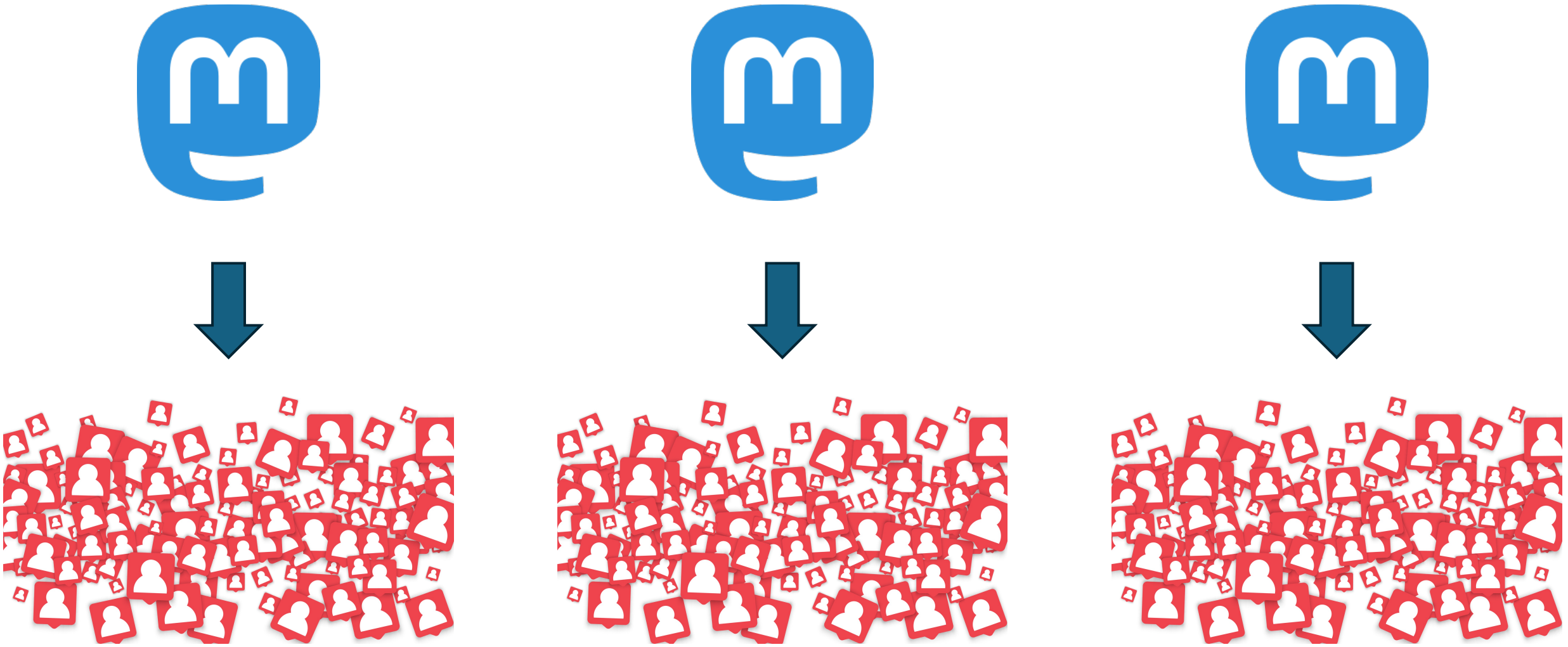
Each Reddit community has its own:

- Separate web pages
- Submission rules
- Set of moderators
- Moderation bots
- Governance arrangements

Thousands of Reddit Communities



Another decentralized platform: Mastodon



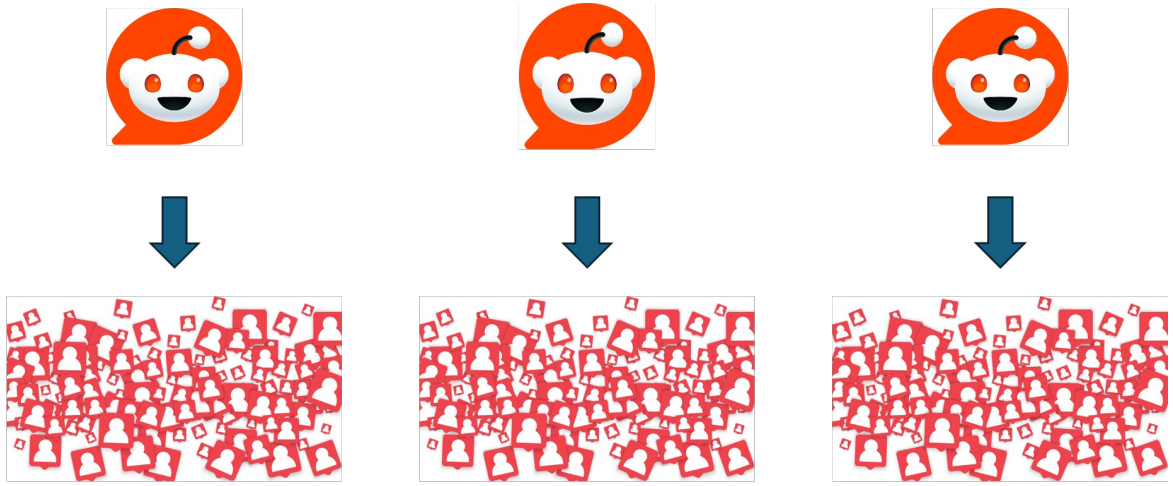
Twitter v/s Decentralized Platforms

Different Approaches To:

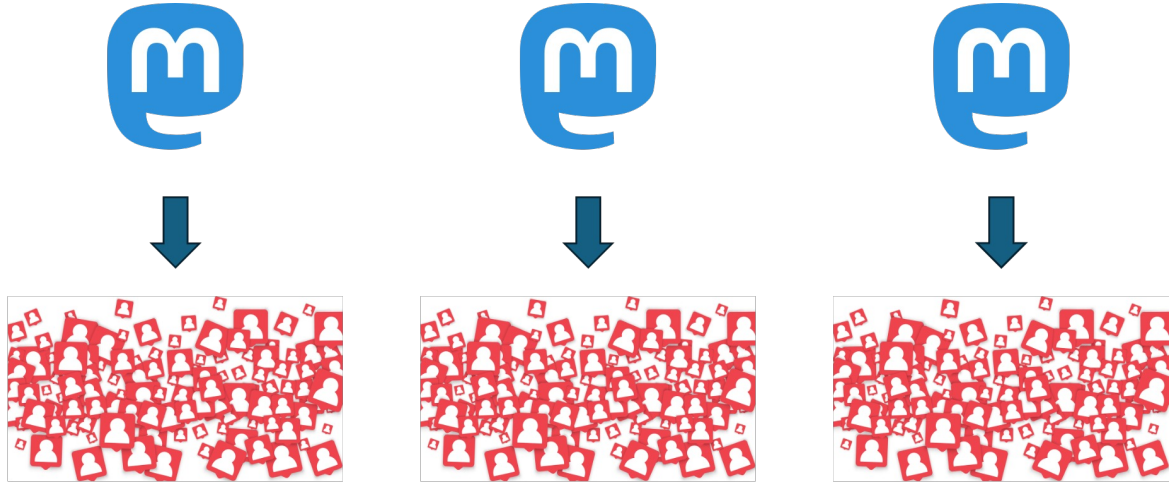
Privacy
Safety
Growth
Censorship
Autonomy
Management
...

Different Flavors of Decentralized Governance

Reddit



Mastodon

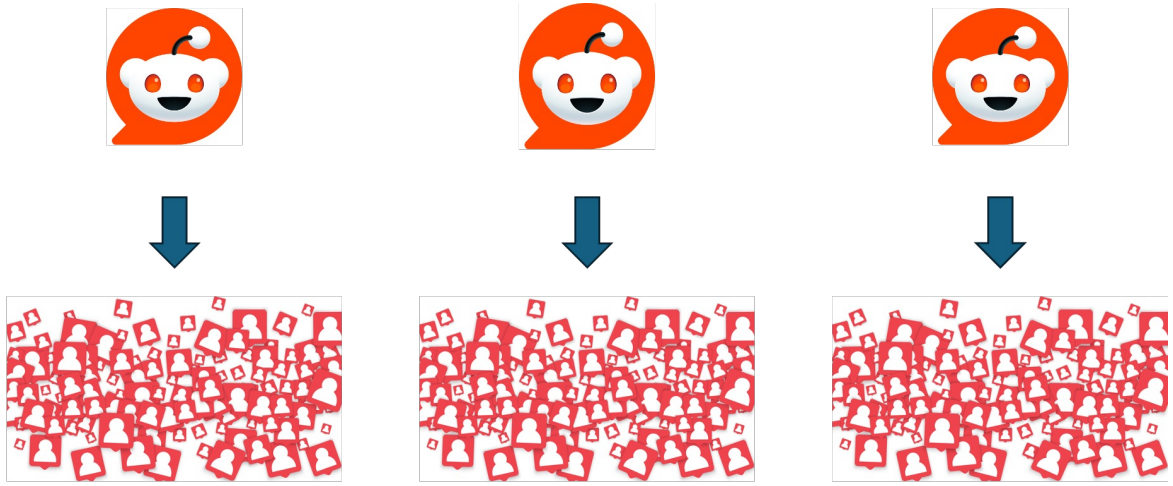


Different Flavors of Decentralized Governance

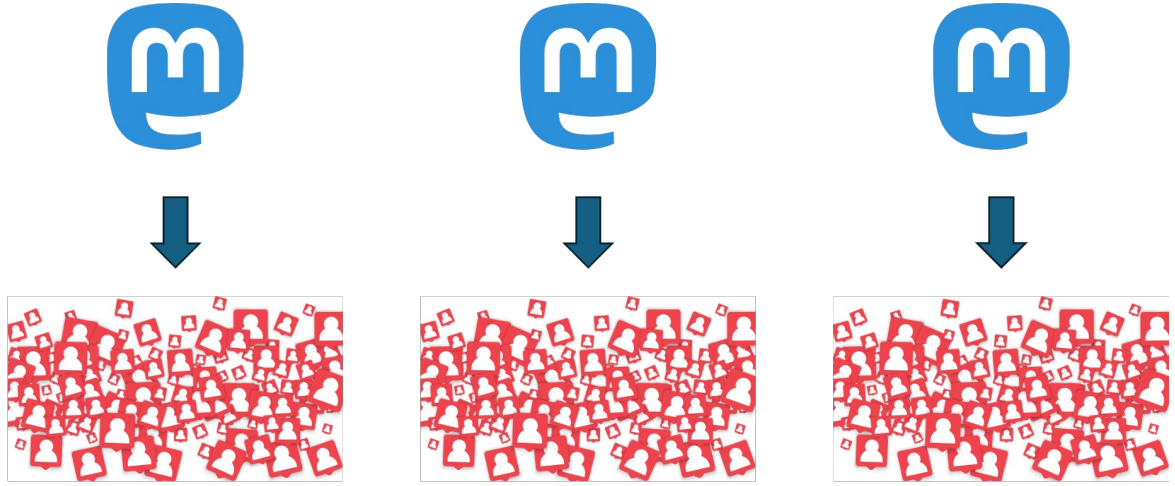
Top level

Reddit Admins

Platform-wide Actions



------ No top level ------



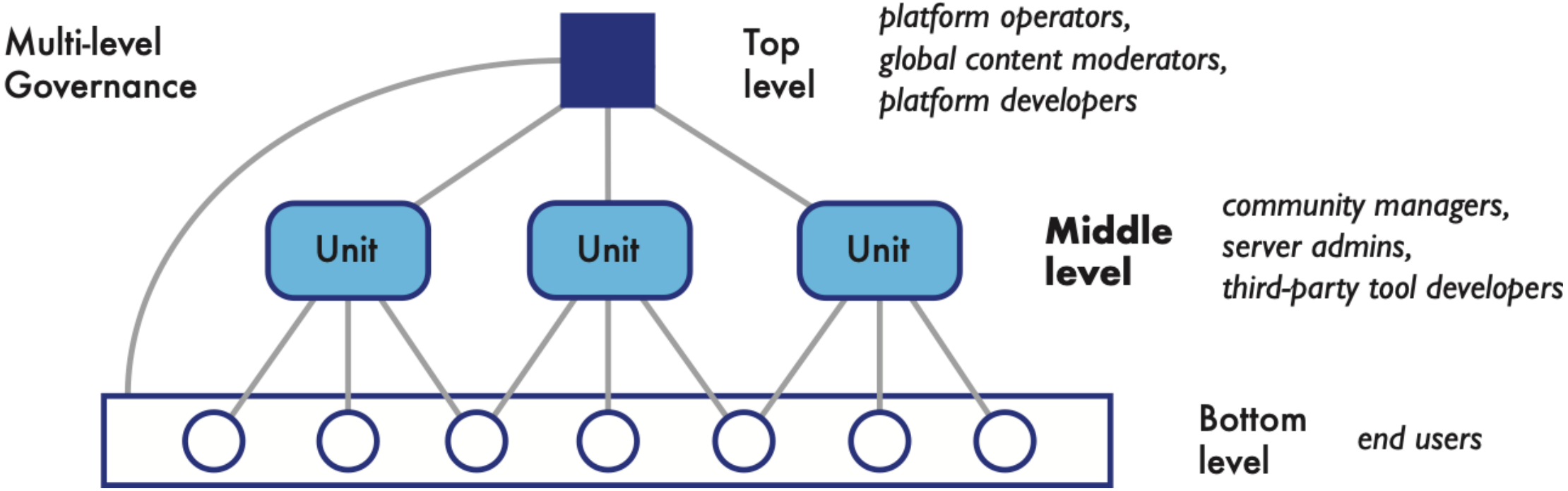
Different Flavors of Decentralized Governance

Research Questions

- What is the range of variation in how platforms organize multi-level governance systems?
- What are the implications of this range for the value users receive from their platforms and the content they volunteer to contribute?

Multi-level Governance:

A Lens to Characterize Different Flavors of Decentralized Governance



Multi-level Governance:

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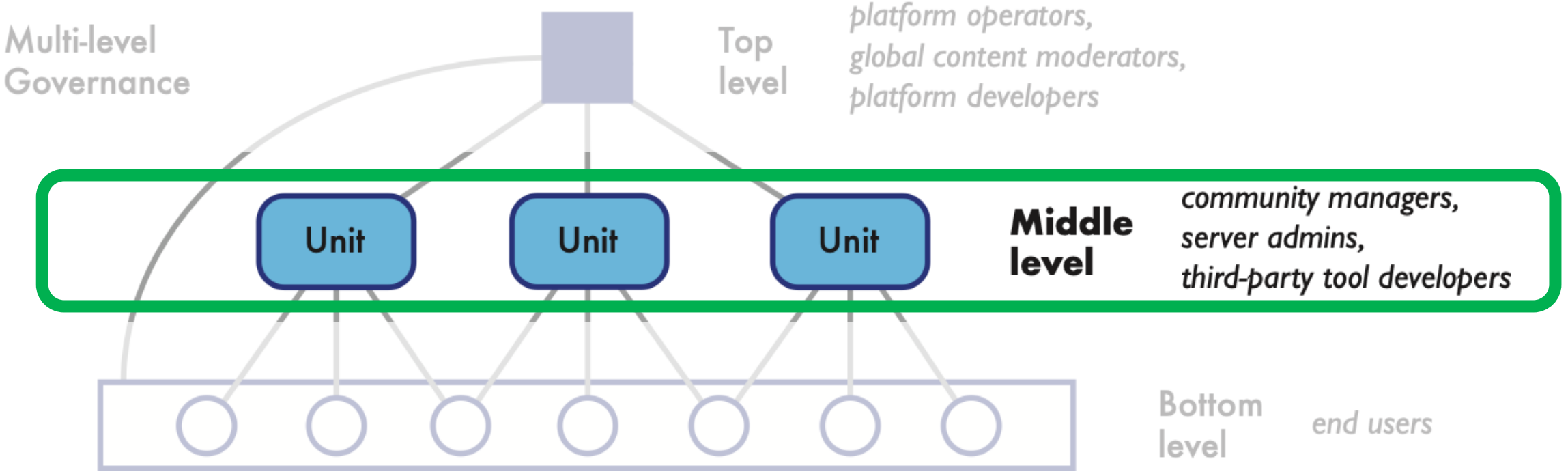
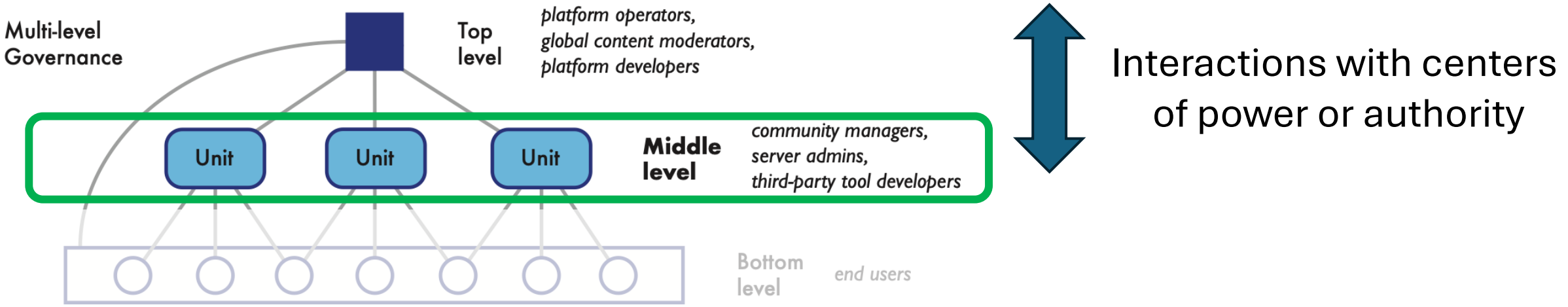
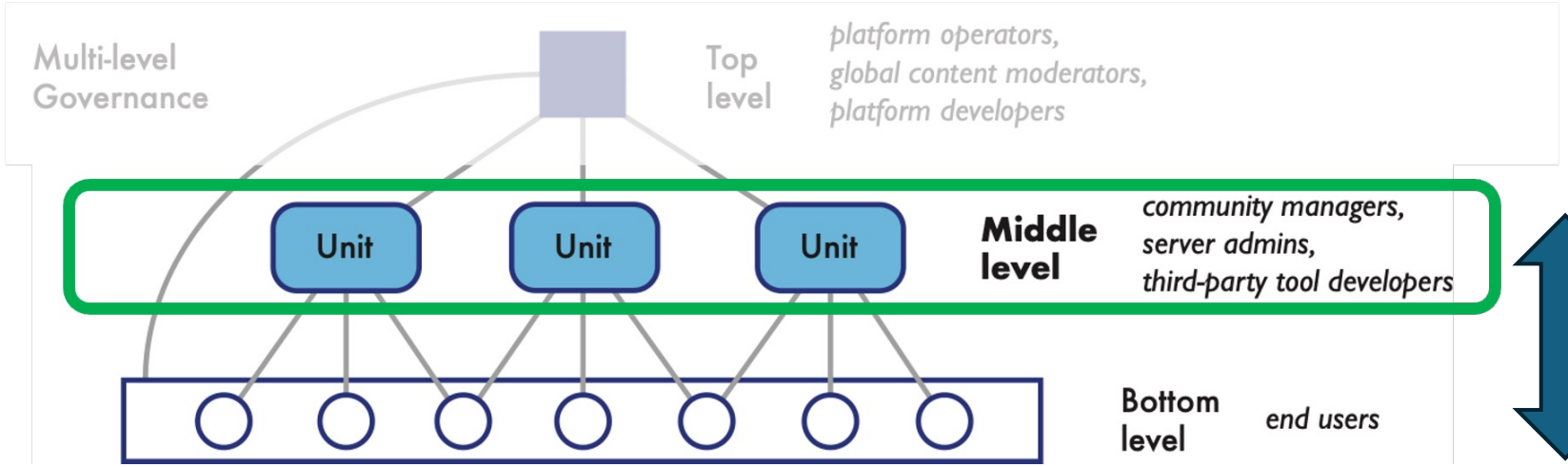


Middle Levels : Interactions with Top Level



Interactions with centers of power or authority

Middle Levels : Interactions with Bottom Level

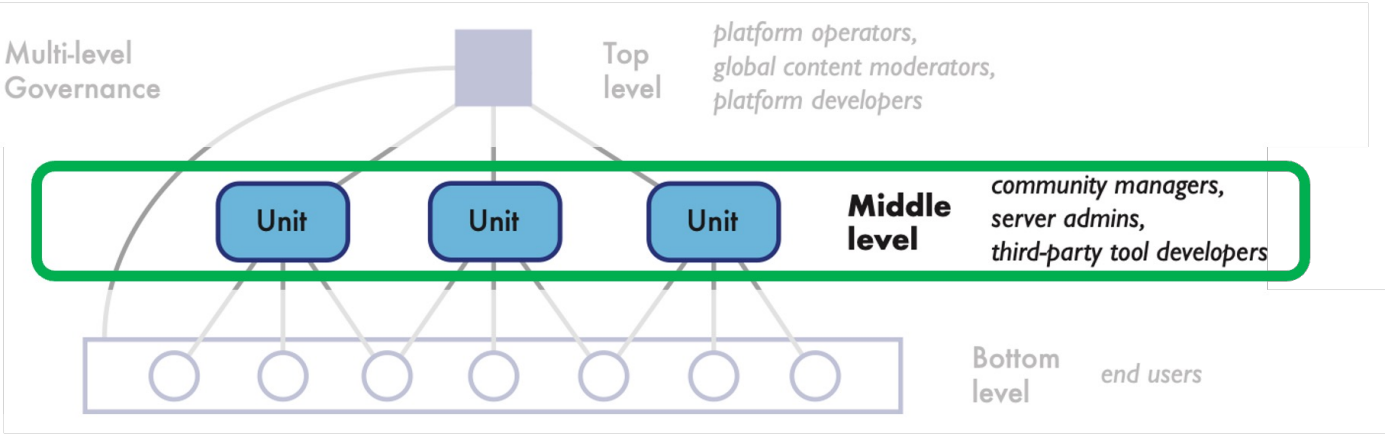


Interactions with end-users at the bottom level

Why Focus on Middle Levels of Governance?

They are the main arena for low-level agents to:

- Collectively organize with each other
- Collectively organize against top-level agents
- Interact with other kinds of middle levels

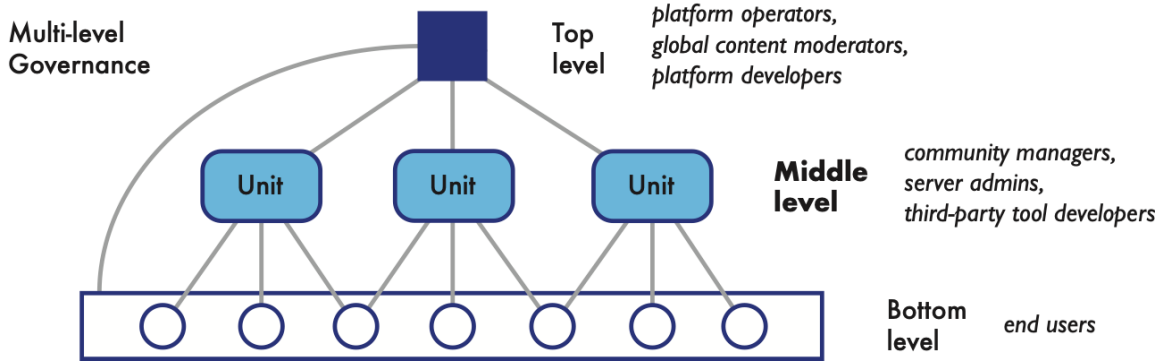


Middle Levels are Ubiquitous Online

- Reddit subreddits
- Mastodon nodes
- Facebook groups
- YouTube channels
- Twitch channels
- Wikipedia language editions
- WhatsApp groups
- Minecraft servers
- Twitter blocklists

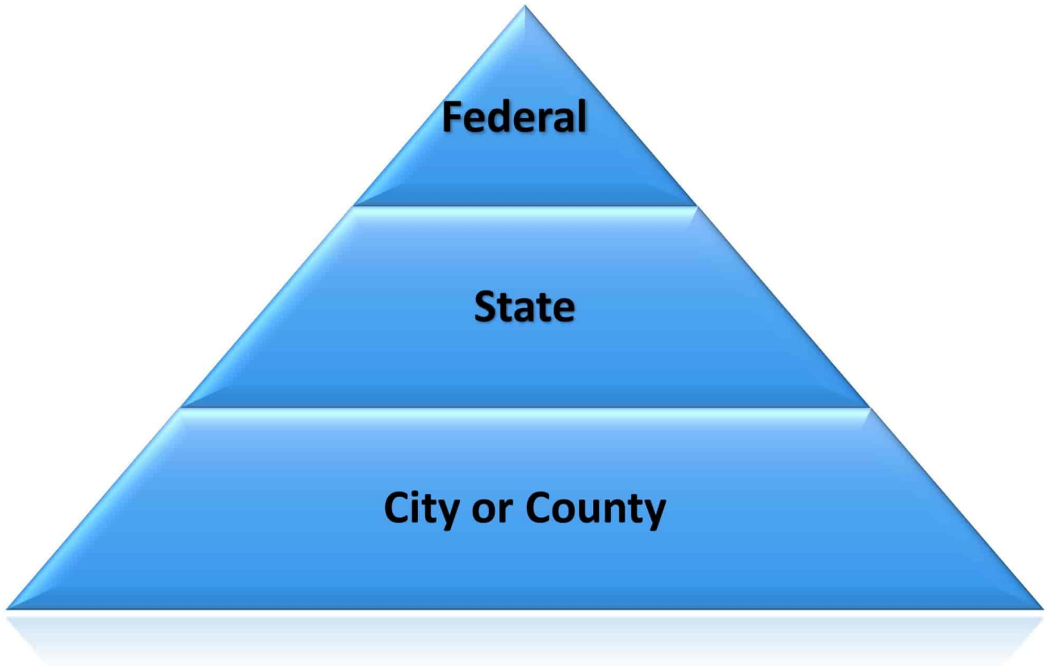
Research Contributions

- We propose dimensions for how middle levels can vary in structure and design.
- We show how new designs can negotiate between the advantages of centralization versus decentralization toward more ethical, sustainable, and empowering online platforms.
- We offer practical design implications for online communities, drawing on lessons learned from offline and online institutions.

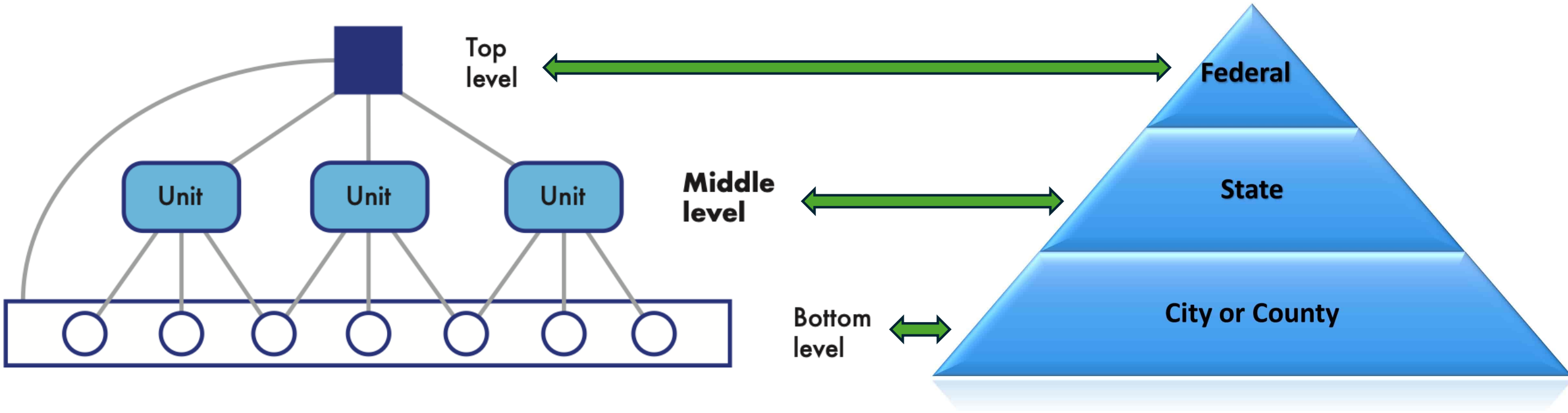


US Federalism Model: Decentralized governance

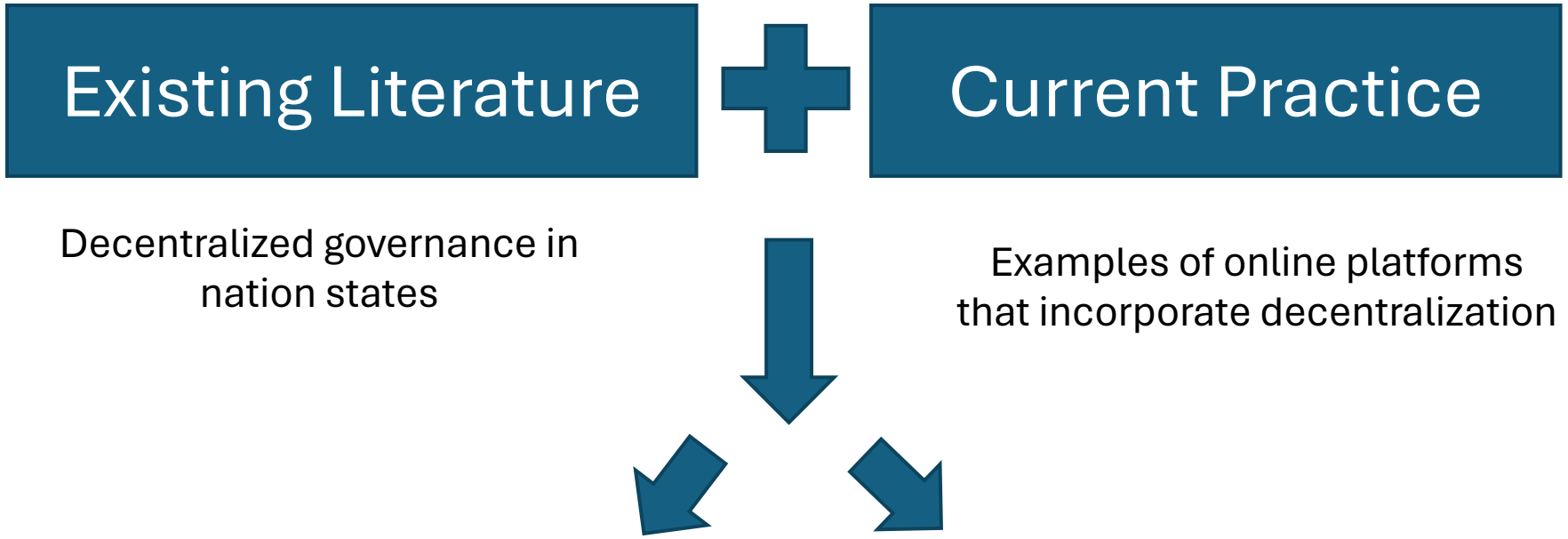
- An overarching federal government
  - Responsible for broader governance
- States governments
  - Accede to federal government
  - Issues of local concern in their cities or counties
- The federal government also governs states and cities.



Analogy with How the US Government Works



Approach

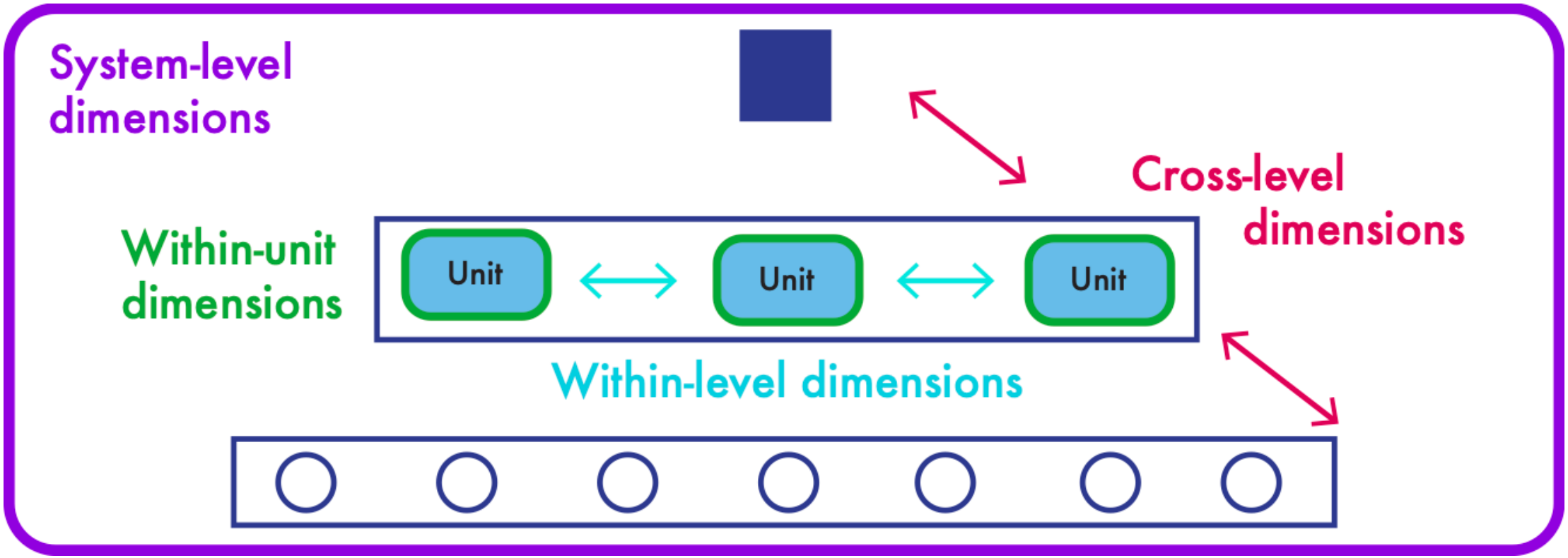

Existing Literature
Current Practice
Decentralized governance in nation states
Examples of online platforms that incorporate decentralization
What can we learn?
What remains to be explored?

Approach

- Drawing from theories of offline governance
  - Federalism
  - Polycentricity
  - Organizational theory
- Iterative exploratory process, combining:
  - Taxonomies from the above literatures +
  - Case studies of online governance
- Involved interpretation, redefinition, and verification of emerging dimensions
- Comparisons of dimensions with one another
- Relations of dimensions to the above literature

Theoretical Framework

A General Framework for Multi-level Design:
Four Sources of Design Variation



A General Framework for Multi-level Design:
Within-level or ‘Lateral’ Dimensions

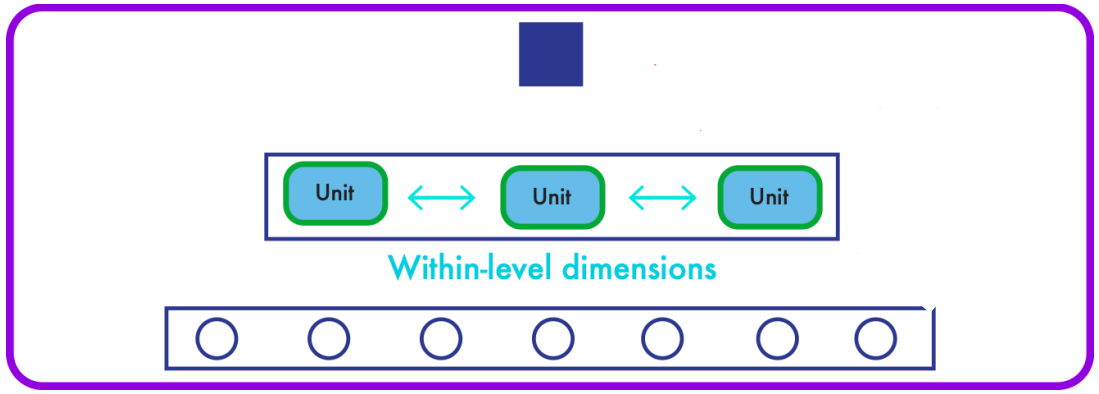
Variation in how middle-level units interact with one another.

Examples:

- Mastodon nodes can federate with or block other nodes
- Wikipedia articles link across language editions

Dimension: “Transit costs” between units:

- Subreddits v/s WoW

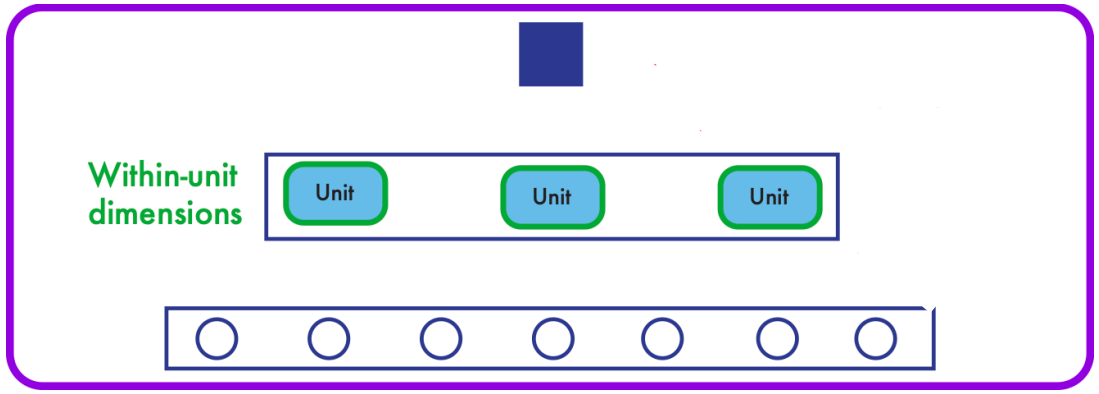


A General Framework for Multi-level Design:
Within-unit Dimensions

Cross-platform differences in the internal characteristics of middle-level units.

Example: Transparency of a middle-level unit's governance

- Reddit communities v/s Facebook Groups
  - Publicly viewable rules

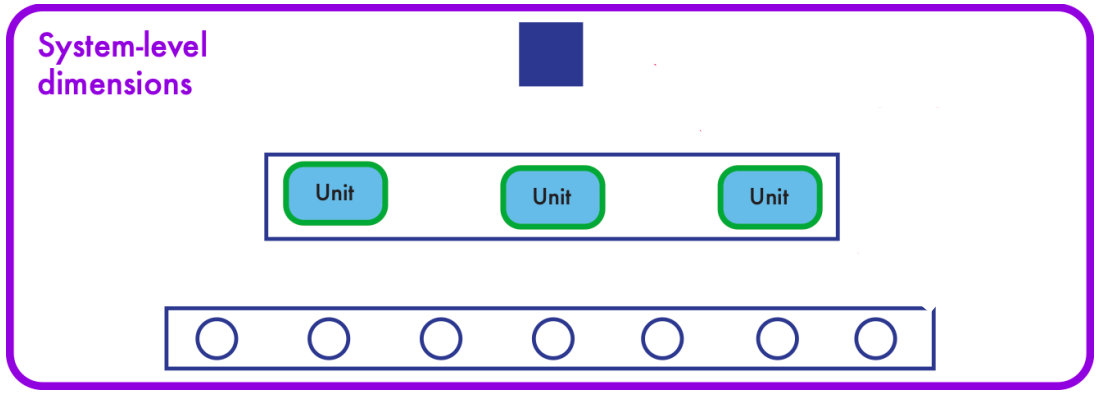


A General Framework for Multi-level Design:
System-level Dimensions

High-level dimensions that influence multi-level architecture

Example: Depth of nesting of middle levels

- Subreddits are the only formal middle level
- Wikipedia has Wikiprojects under different language editions



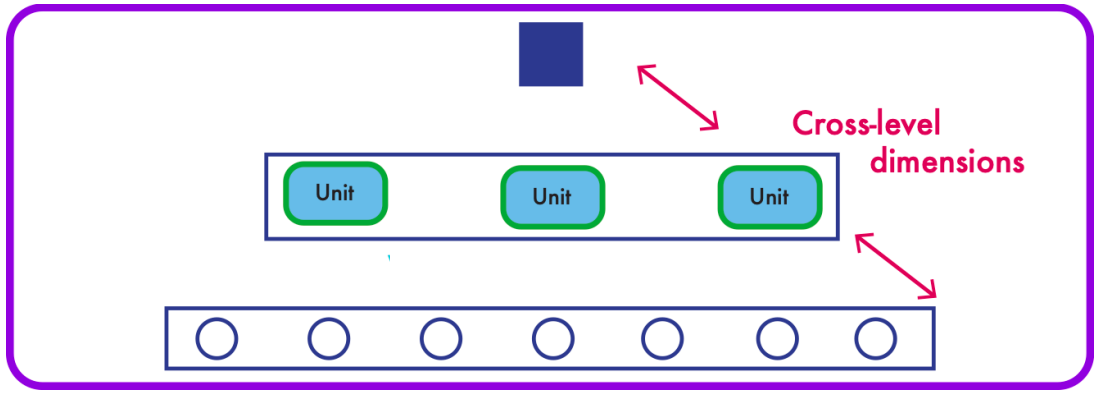
A General Framework for Multi-level Design:
Cross-level or 'Vertical' Dimensions

Variations in how middle-level units can interact with:

- Platform administrators above
- End users below

Five cross-level dimensions:

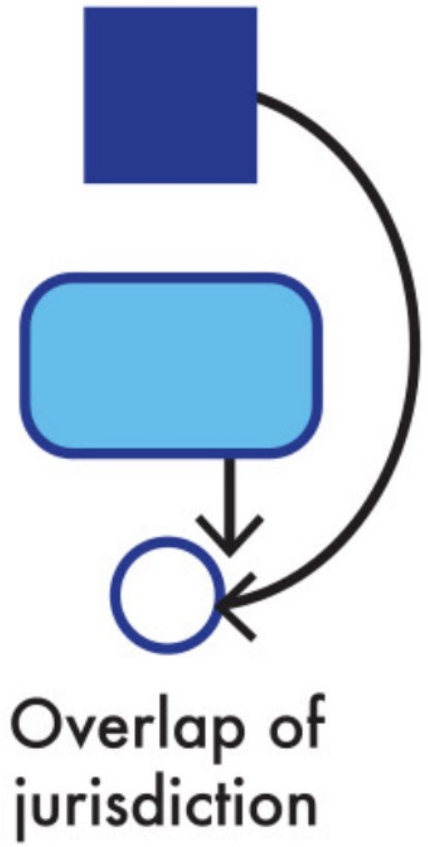
- Overlap of jurisdiction
- Cross-cutting membership
- Degree of autonomy
- Degree of authority
- Degree of support



Cross-level Dimensions:
Overlap of Jurisdiction

Degree of overlap between the middle and the top level regarding their areas of responsibility:

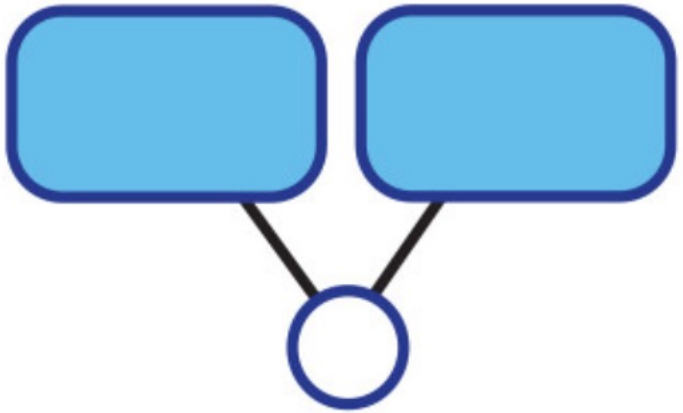
- What are each level's governance actions, and
- How much do those overlap?
- Example: YouTube platform and YouTube creators



Cross-level Dimensions:
Cross-cutting Membership

This indicates whether the membership in each unit is exclusive — that is, whether two units can govern the same user.

- Example: WhatsApp users can simultaneously join more than one group.
- Contrast: WoW guilds

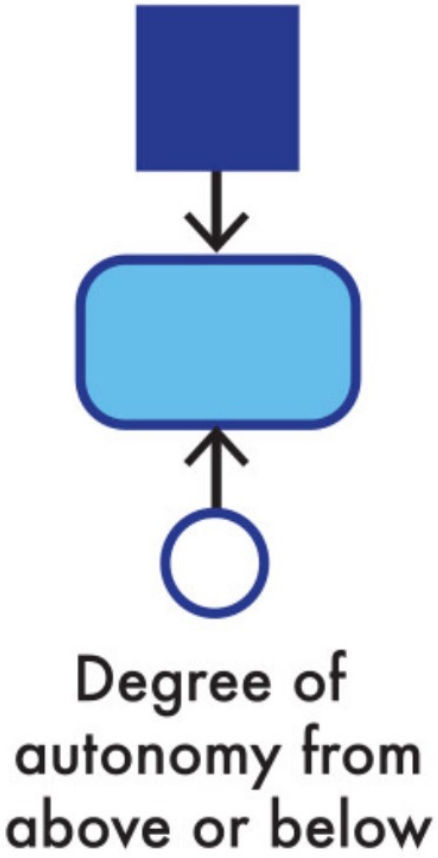


Cross-cutting membership

Cross-level Dimensions:
Degree of Autonomy from Above or Below

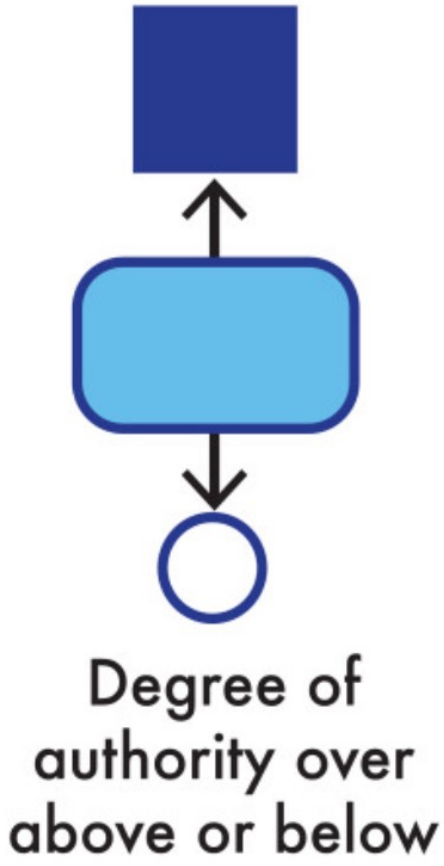
Extent to which middle-level units can operate independently or have accountability to another level that constrains their autonomy.

- Example: In WhatsApp, end-to-end encryption limits platform visibility
- Example: Reddit users can report abusive moderators.



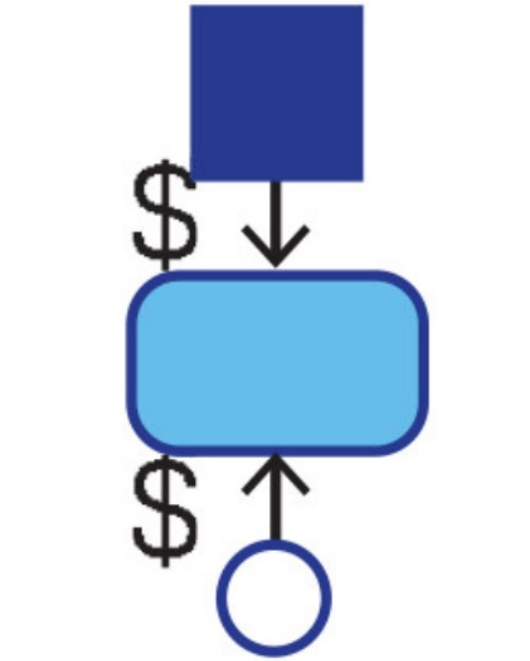
Cross-level Dimensions:
Degree of Authority over Levels Above or Below

- Related to autonomy *from*.
- It refers to the ability to regulate or sanction.
- Piecing out the direction of a unit's authority distinguishes different instances of multi-level governance
- Example: Facebook Group admins have authority over Group members.
- Authority over higher levels is usually weak, e.g., Reddit Moderator Council

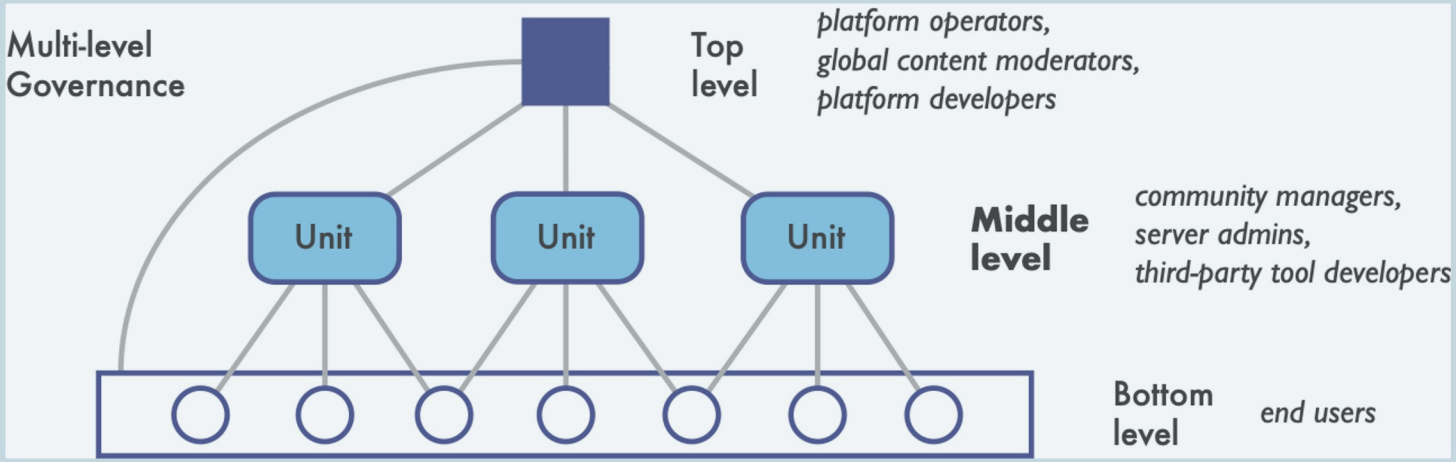


Cross-level Dimensions:
Support by Levels Above or Below

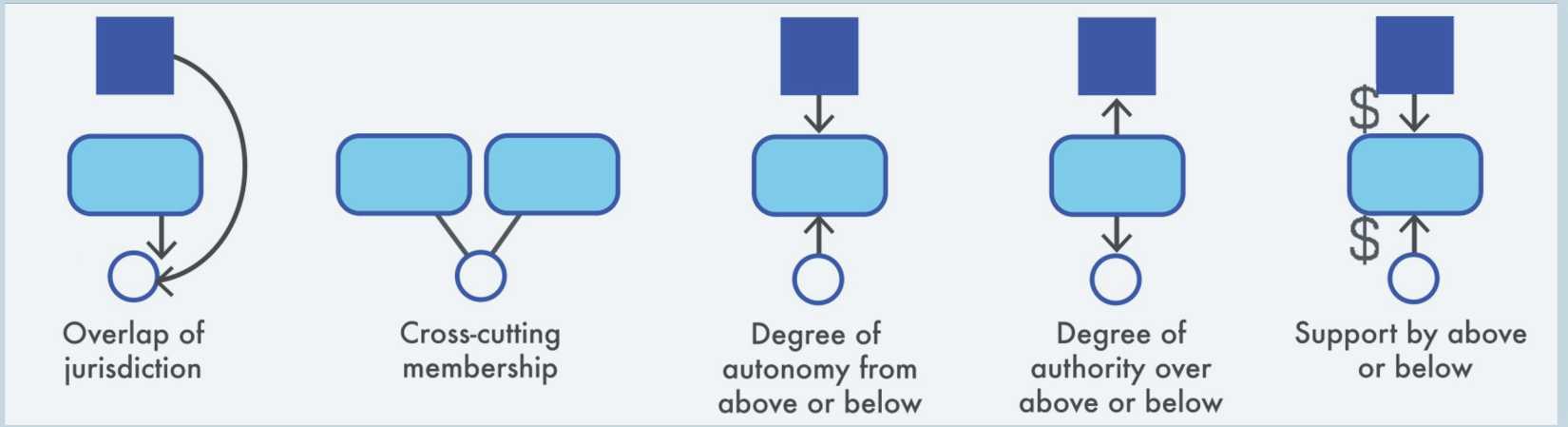
- This measures how middle levels are supported by higher levels through:
  - receiving technical help or
  - getting access to moderation resources.
- Example: Discord launched a Moderator Academy to educate server mods.
- Levels of support from below could be quantified based on whether a middle level is wholly or partially user-run and user-funded,
  - e.g., private Mastodon servers.

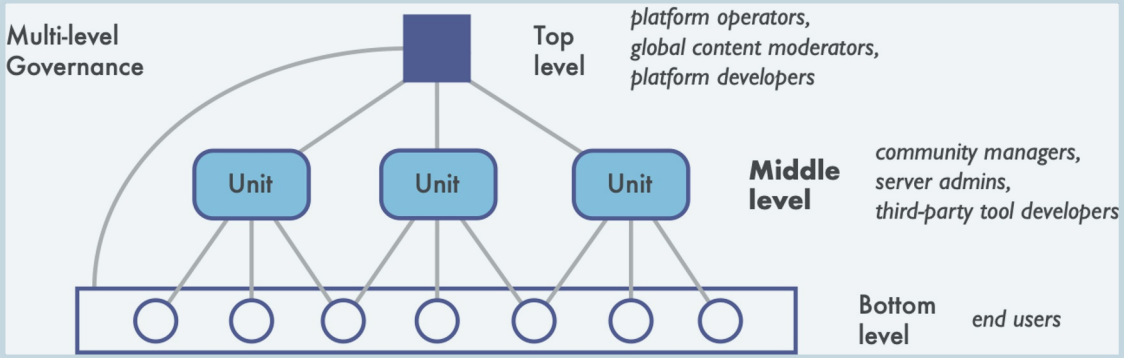


Support by above or below



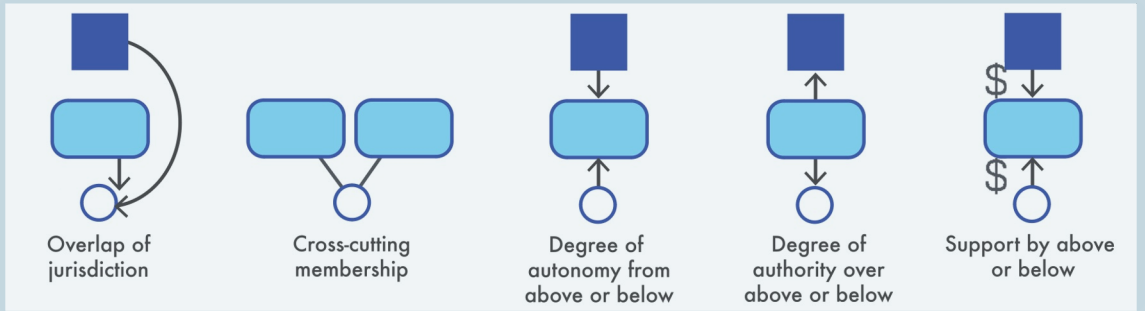
Design Implications





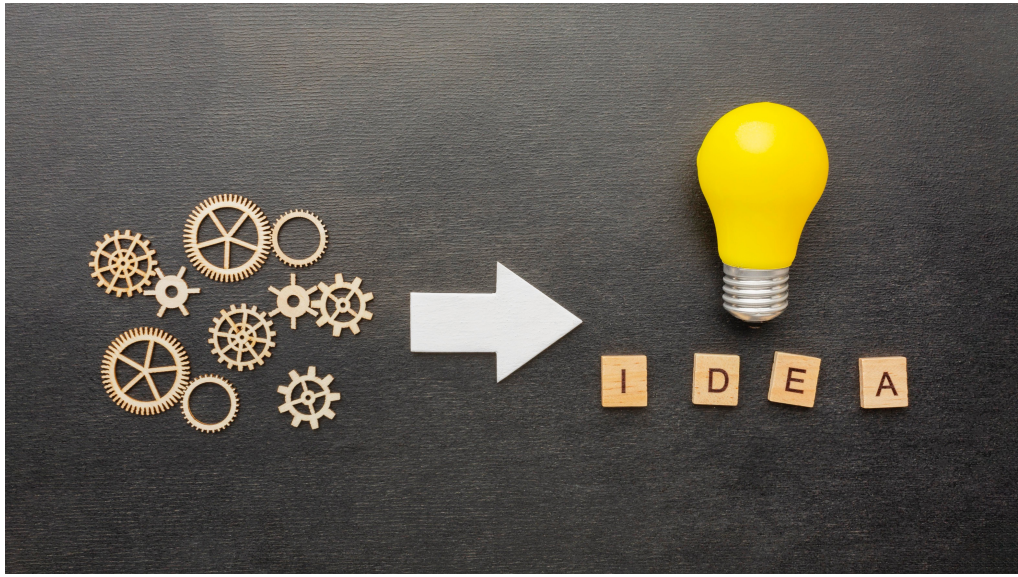
Design Implications:

Lessons from Offline Governance Literature



Enabling Innovation, Adaptation, and Healthy Competition

- As communities evolve, their survival partly depends on their willingness to evolve their governance in response to events.
- To enable innovation and adaptation, online social platforms should provide *autonomy* and *support* to local administrators' experiments with:
  - community guidelines,
  - sanctioning criteria, or
  - automation settings
- Competition between different governance units induces self-regulating tendencies
  - It compels units to demonstrate their value to members
- However, competition can be detrimental when it leads to cross-community conflict
  - Platforms with cross-cutting memberships may be able to avoid excessive competition, as joining one unit does not imply exiting another.



Facilitating Social Learning

- Many platforms do not offer formal avenues for administrators in different centers to communicate with one another:
  - Leading to inefficiencies such as the building of redundant tools
- Allowing for cross-cutting membership permits members to be in multiple communities and enables knowledge transfer.
- Top level can also facilitate social learning
  - Given some overlap in the jurisdiction, the top level could promote specific middle-level solutions to additional middle-level units.

Establishing Accountability

- Little evidence of top levels actively evaluating middle-level units
- Accountability can come from levels below
  - E.g., processes for users to report
- A middle level supported from below would
  - Work autonomously from the level above
  - Obliged to hold greater accountability to the levels below.

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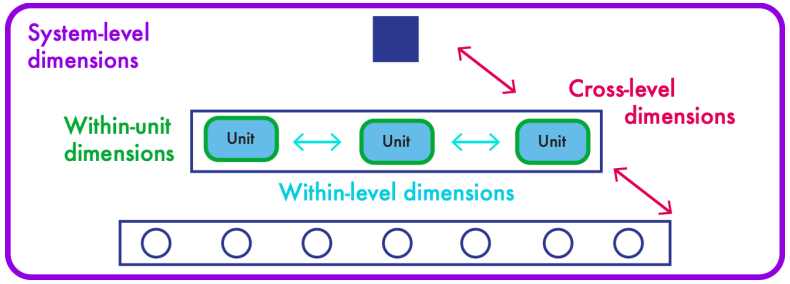

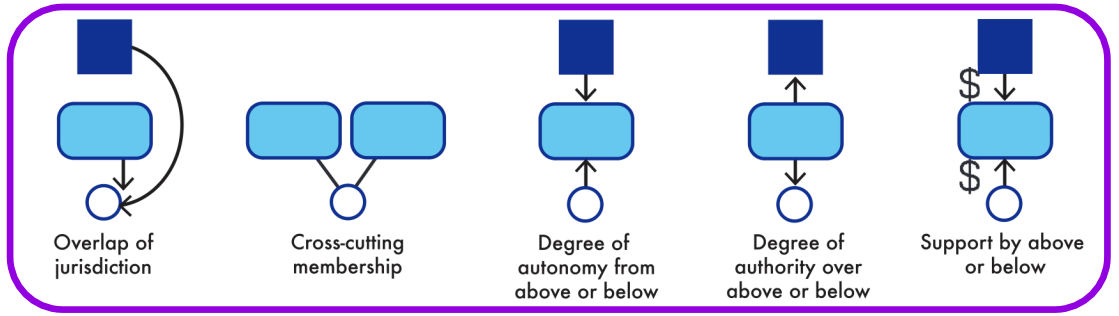

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