

# Title: A Scalable Model of Distributed Power Dynamics in Digital Communication Environments

## Abstract:

This paper presents a thought experiment exploring power dynamics within digital communication environments, specifically focusing on the influence of majority rule in moderating individual behavior. We introduce a model based on the principle of "two out of three agree," demonstrating its scalability and impact on individual free agency within groups of varying sizes. This model provides insights into the complexities of distributed power and rule enforcement in online communities.

## 1. Introduction:

Online communication platforms are characterized by complex social interactions and power dynamics. Effective moderation is crucial for maintaining order and fostering positive environments. This paper proposes a simplified model to analyze how power is distributed and exercised within these environments, focusing on the concept of majority rule in a dynamic where "two out of three agree" to enforce rules. This model is designed to be scalable, maintaining its core principles regardless of group size.

## 2. Model Description:

The core of our model is the principle that any action requiring rule enforcement necessitates the agreement of at least two entities out of a potential three directly involved in the interaction. This can be visualized as follows:

- \* Entities: Individual members of the communication environment.
- \* Interaction: A specific event or situation requiring a decision (e.g., a member exhibiting disruptive behavior).
- \* Rule Enforcement: The action taken in response to an interaction, such as a warning, temporary removal, or permanent ban.
- \* "Two out of Three Agree" Principle: Rule enforcement requires the consensus of two entities directly involved in the interaction. Other entities present in the environment are not considered in this specific instance of rule enforcement.

## 3. Scalability:

A key feature of this model is its scalability. The "two out of three agree" principle remains consistent regardless of the total number of entities present in the communication environment.

Consider a scenario with five entities (A, B, C, D, and E). If entity D exhibits disruptive behavior, the decision to take action against D still requires the agreement of two other entities (e.g., A and B, or C and E). The opinions of the remaining entities are irrelevant to this specific decision. This demonstrates that the core power dynamic is maintained even as the group size increases.

#### **4. Impact on Free Agency:**

This model has significant implications for individual free agency within the group. An entity's freedom to act is constrained by the possibility of two other entities agreeing to enforce rules against them. Conversely, an entity is protected from arbitrary action by a single individual, as enforcement requires a majority.

#### **5. Discussion:**

This model offers a simplified yet insightful perspective on distributed power dynamics in online environments. It highlights the importance of coalition formation and the limitations of individual power, even for designated moderators. The scalability of the model makes it applicable to groups of varying sizes, demonstrating a consistent principle for rule enforcement.

#### **6. Limitations and Future Research:**

This model is a simplification of real-world interactions and does not account for all possible complexities. Future research could explore the effects of:

- \* Varying degrees of influence between entities.
- \* Dynamic coalition formation over time.
- \* The impact of communication channels and information flow.
- \* The introduction of more complex voting or decision-making systems.

#### **7. Conclusion:**

The "two out of three agree" model provides a useful framework for understanding distributed power dynamics in digital communication environments. Its scalability and focus on local interactions offer valuable insights into how order can be maintained and individual free agency can be balanced within online communities.