Symmetry and Structural Consistency in Multi-Actor Mandate Evaluation: A Coefficient Model for Perceived Institutional Impartiality

Code+Philosophy

Abstract

Mandate-constrained institutions frequently evaluate multiple actors under similar normative frameworks. Even when formal procedures are identical, perceived asymmetry in investigative focus, evidentiary standards, or enforcement intensity may undermine institutional credibility. This paper extends the Intent Integrity architecture by introducing a Symmetry Coefficient (SC) model for evaluating cross-actor consistency. Rather than assessing moral equivalence between actors, the framework measures structural parity in evaluative treatment relative to mandate scope. The model integrates weighting functions, variance normalization, and friction-adjusted alignment metrics to distinguish legitimate procedural differentiation from destabilizing asymmetry. The resulting coefficient provides a diagnostic tool for monitoring institutional credibility in politically charged multi-actor environments.

1 Introduction

Institutions operating under investigative or monitoring mandates often assess multiple actors within the same normative domain. In such settings, credibility depends not only on fidelity to declared mandate (Weber, 1978; Easton, 1965) but on structural consistency across actors (Suchman, 1995; Barnett & Finnemore, 2004).

Perceived asymmetry is one of the primary drivers of delegitimization narratives (Tyler, 2006). Importantly, symmetry does not imply identical outcomes. It implies consistent application of evaluative dimensions.

The relevant question is not whether actors differ in conduct. It is whether institutional evaluation differs in structurally defensible ways. Institutional theory suggests that legitimacy emerges from procedural fairness and predictable application of rules (March & Olsen, 1989; Scott, 2014). This paper formalizes structural consistency across actors through a measurable symmetry coefficient.

2 Actor-Indexed Evaluation Model

Let:

$$A_i(t) \in \mathbb{R}^n \tag{1}$$

represent the action vector for actor i under investigation.

Each dimension corresponds to a standardized evaluative category:

- Proportionality assessment
- Civilian harm evaluation
- Legal compliance review
- Evidence sufficiency
- Reporting transparency

These dimensions must align with the mandate vector $I(t)$ introduced in Paper I. Alignment between mandate and actor-indexed evaluation ensures normative coherence (Keohane, 1984).

3 Differential Evaluation Vector

For two actors i and j, define:

$$\Delta_{ij} = A_i(t) - A_j(t) \tag{2}$$

However, direct comparison must account for contextual weighting.

Introduce weighting matrix W_C:

$$\Delta^*_{ij} = W_C \Delta_{ij} \tag{3}$$

Where W_C adjusts for:

- Jurisdictional differences
- Access constraints
- Scale of alleged conduct
- Evidentiary variation

This prevents false equivalence and reflects comparative institutional analysis approaches (Young, 1999).

4 Symmetry Coefficient (Normalized)

We define the structural symmetry coefficient:

$$SC_{ij} = 1 - \frac{\sum_{k=1}^{n} \alpha_k |x_{ik} - x_{jk}|}{\sum_{k=1}^{n} \alpha_k \cdot MaxDeviation_k} \tag{4}$$

Where:

- α_k = dimension weight
- $MaxDeviation_k$ = maximum tolerable contextualized difference

Interpretation:

- $SC_{ij} \approx 1 \rightarrow$ high structural parity
- $0.7 < SC_{ij} < 1 \rightarrow$ tolerable differentiation
- $SC_{ij} < 0.7 \rightarrow$ asymmetry risk
- $SC_{ij} < 0.5 \rightarrow$ destabilizing asymmetry

The coefficient does not evaluate actor guilt. It evaluates institutional consistency.

5 Integration with Intent Integrity

For actor i:

$$III_i(t) = 1 - \frac{\|I(t) - A_i(t)\|}{\|I(t)\|} \tag{5}$$

System-wide institutional stability requires:

$$Stability(t) = f\left(\overline{III_i(t)}, \overline{SC_{ij}}\right) \tag{6}$$

High intent integrity with low symmetry produces perceived bias.

High symmetry with low intent integrity produces procedural formalism without mandate fidelity.

Both must remain above threshold.

6 Asymmetry Amplification Under Friction

Recall friction operator from Paper I:

$$I'(t) = D_F(I(t)) \tag{7}$$

Friction may disproportionately affect actor evaluation:

$$A_i'(t) = D_{F_i}(A_i(t)) \tag{8}$$

This introduces asymmetry even when mandate fidelity is intact. Monitoring SC_{ij} over time detects distortion emerging from political pressure (Pierson, 2004).

7 Governance Reform Implications

The Symmetry Coefficient enables institutions to:

- Audit cross-actor consistency
- Detect emerging politicization narratives
- Distinguish contextual differentiation from bias
- Strengthen procedural transparency
- Preempt credibility erosion

The model reinforces procedural justice theory (Tyler, 2006) and institutional legitimacy scholarship (Suchman, 1995). It protects institutional neutrality rather than enforcing substantive equivalence.

8 Conclusion

In multi-actor environments, structural symmetry is essential to institutional legitimacy. The Symmetry Coefficient formalizes parity assessment without collapsing contextual nuance. When combined with the Intent Integrity Index, institutions gain a two-dimensional credibility monitoring architecture:

- Fidelity to mandate
- Consistency across actors

Together, these form the core of structurally defensible governance.

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