

METAPHORUM 2026

Viable for Whom?

Contested Identity in the Viable System Model

Dr Terence Love · Variety Dynamics · doi.org/10.5281/zenodo.22996084

OPENING

Two men being chased by a bear.

First man: “Can you run faster than the bear?”

Second man: “I only need to run faster than you.”

Viability is relative, not absolute — hold that thought.

THE BOUNDARY

Ashby's Law - VSM's problem inheritance

- Ashby's LoRV is a simple two-object rule: regulator variety must match disturbance variety at a fixed moment in time
- VSM inherits the limitations of Ashby's LoRV at every recursive level
- Ashby's Law of Requisite Variety is not very useful for most real-life high-stakes situations. In real-world dynamic situations, it is not possible to decompose everything into static pairwise variety balances.

Where it breaks

- VSM needs the situation to hold still. Most high-stakes situations don't.
- Multi-entity situations, where entities are forming, dissolving, merging, renegotiating what they are.
- No fixed situation exists to match variety against (changing purposes, boundaries, ethics, entities, feedback loops....)

SITUATION VS. SYSTEM

Situation

- Boundaries shift rather than hold fixed and causal architectures evolve (Axiom 50)
- Feedback loops emerge or dissolve over time, relationships change (Axiom 50)
- Boundaries can be open, not closed (Axioms 29, 31)
- Purpose need not be stable or singular, and constituencies overlap rather than partition cleanly
- Outcomes are reversible only in special instances, not by default (Axiom 31)

A ***System*** is a special, restrictive case of a ***Situation***.

Most real-world issues are ***Situations*** not ***Systems***

VSM only applies to ***Systems***

The Two-Feedback-Loop Limitation Axiom

- Human mental prediction fails categorically beyond one feedback loop. This is a biological limit, not a matter of expertise.
- Beyond one feedback loop, formal modelling is compulsory. Social and participatory methods cannot predict outcomes or how a situation or system behaves. They can only supply information about structure and purposes and confer legitimacy.
- Group consensus about outcomes beyond one loop is a failure, not a success, and the group's confidence in it is mistaken.
- Participation is an attack surface. Whoever shapes agreed identity, purpose and opinions constrains everything after.

BETTER DEFINITION OF COMPLEXITY

Simple · Complex · Hyper-complex

Simple Systems

zero or one feedback loop

Mental models, discussion and expert judgment are sufficient. Scale does not matter — thousands of variables but one loop still stays within the boundary.

AXIOM 49

Complex Systems

two or more feedback loops

Mental prediction fails. Formal modelling is compulsory (e.g. System Dynamics, agent-based, emergent, functional, computational modelling).

AXIOM 49

Hyper-complex Situations

Does not satisfy the assumptions needed for systems and causal analysis.

Boundaries and entities change, loops emerge and disappear and change as do relationships and causal architectures. Purposes, functions, roles and other aspects change independently.

AXIOM 50

Axiom 1 — Generalisation of Ashby's Law

“In complex and hyper-complex situations involving multiple constituencies where variety generation and control distribution is uneven, the differing distributions create a structural basis for power asymmetries and differential control over the system's structure, evolution, and distribution of benefits and costs.”

Transforms Ashby's Law of Requisite Variety to apply to multi-actor hyper-complex variety spaces.
Focuses on POWER and VARIETY rather than CONTROL

Axiom 2 — Variety change moves the locus of power

“When less powerful constituencies increase the variety that more powerful constituencies manage, the locus of power shifts toward the less powerful.”

The locus of power is not fixed. It changes with the dynamics of variety distribution.

THE VSM QUESTION

“Viable for whom?”

- VSM supports improving the viability of a single organism and assumes a single identity.
- System 5 answers this by fiat, by setting identity and purpose of one organisation for the whole.
- Variety of every other candidate beneficiary is erased from the model.

Cybersyn — chronology only

- 1970** Nixon directive to prevent Allende consolidating power — predates his inauguration. “Track II” covert action begins.
- 1972** Cybersyn helps coordinate the response to the truckers' strike — a genuine technical success.
- 1973** Military coup. Government overthrown.

APPLYING VARIETY DYNAMICS AXIOMS

Variety Dynamics axiom set for Chile/CyberSyn

- Axiom 2 — variety generation to change locus of power
- Axiom 14 / 46 — time as a dimension of variety
- Axiom 18 — control of problematic elements
- Axiom 33 — centre–periphery power flows
- Axioms 34–36 — transaction costs
- Axiom 41 — the boundary made visible
- Axiom 44 — organisational stability across internal, external, and developmental variety
- Axiom 48 — discontinuity and cusps
- Axiom 49 — the two-feedback-loop boundary of human prediction
- Axiom 50 — hyper-complex situations

APPLYING THE AXIOMS

Axiom 33 — centre-periphery power flows

“When an organization has a powerful centre and less powerful periphery, the centre maintains control by ensuring its control variety exceeds peripheral variety, or by attenuating peripheral variety generation. If peripheral units generate variety at a rate the centre cannot afford to counter due to transaction costs, power flows from centre to periphery.”

Cuts both ways: read Allende's government as periphery against US-centred capital, not only as centre against Chilean industry.

APPLYING THE AXIOMS

Axiom 49 — the boundary, defined

“Systems are distinguished by their feedback loop structure relative to the two-feedback-loop boundary of human mental prediction capacity. This creates two operational categories: simple/complicated systems (zero or one feedback loop, mental and discursive methods sufficient) and complex systems (two or more feedback loops, formal modelling required).”

Human prediction holds reliably to one feedback loop. At two, formal modelling is obligatory — not optional.

APPLYING THE AXIOMS

Axiom 41 — the boundary made visible

“In complex situations, the locus of power can be changed by changes to variety distributions operating beyond the two-feedback-loop cognitive boundary ... effectively invisible to those affected.”

APPLYING THE AXIOMS

Axiom 50 — hyper-complex situations

“Hyper-complex and chaotic systems violate assumptions necessary for causal analysis to produce reliable predictions. Hyper-complex systems violate structural stability assumptions — boundaries shift, feedback loops emerge or dissolve, relationships transform, and causal architectures evolve ... Both require Variety Dynamics approaches focusing on managing the locus of control rather than predicting causal outcomes.”

Chile, 1970–73, is a hyper-complex situation whose boundaries, loops, and causal architecture were themselves in motion. It is beyond a complex system as it does not conform to the assumptions needed to use systems or causal analyses.

APPLYING THE AXIOMS

Axiom 48 — discontinuity and cusps

“Variety distributions can contain regions where they become discontinuous ... small continuous changes in input varieties produce discontinuous changes in system variety distributions. These discontinuities mark points of irreversibility.”

The coup was not a point on a smooth curve. It is what this axiom predicts happens at a cusp.

APPLYING THE AXIOMS

Axiom 14 / 46 — time as variety

“Time is a dimension of variety ... introduction of variety that changes the time dynamic of availability of variety results in changes to the locus of power.”

APPLYING THE AXIOMS

Axiom 44 — three simultaneous demands

“An organization tends toward stability when the variety it controls exceeds the variety required for controlling its external environment, managing its internal operations, and pursuing its developmental ambitions.”

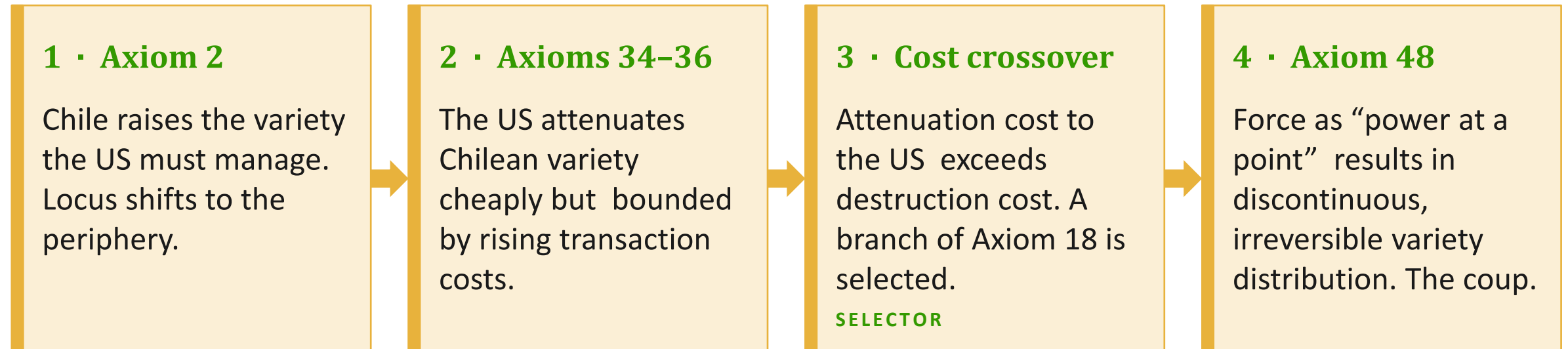
External control, internal management, developmental ambition — Allende's government was short on all three at once.

THE TEST CASE

The 1973 Chile coup as a traverse of Axiom 18

AXIOM 18 · OUTCOME SPACE

Chile is an “errant element” the centre cannot cheaply control. The traverse below selects one outcome.



THE DEEPER SHIFT

“External support” always redistributes power to the supporter. The coup relocated Chilean power toward the US.

A CLOSED MODEL

“Someone else musta shot it.”

Very elderly man boasting about young wife, new baby. The doctor tells him of a hunter whose gun wasn't loaded yet a bear he aimed at dropped dead. The old man: “Someone else musta shot it.” The doctor: “That's what I was trying to say.”

Two loops - the reported fact, and the revised explanation - both exclude the actual determining actor. A closed model doesn't fail loudly. It returns a confident wrong answer.

The hostile locus's power was already committed before Cybersyn existed to be a factor.

Pace governed which branch - attenuate or destroy - was selected.

Not “Cybersyn's engineering failed.” The model had no category for a locus of power operating beyond its own two loops, regardless of Cybersyn's performance.

Viable for Whom? restated

- Conventionally in VSM System 5 answers “viable for whom” by fiat and presents only one locus's criterion as the system's own.
- Chile showed the sharpest version of this problem. “Viable for the US-centred order” and “viable for Popular Unity” were two live, incompatible answers.
- VSM's architecture had no way to represent that there were two.

Variety Dynamics extends VSM's remit usefully

Things Variety Dynamics supplies VSM lacks:

- Extends to situations, i.e., going beyond systems
- Provides Variety Dynamics analysis of power and variety before boundaries settle
- Makes visible issues that are beyond human cognitive analysis
- Identifies multiple, simultaneously-tracked loci of power and their coupling
- Includes cusps and time as primary variables
- Identifies pace as a variable - had Allende's government generated variety more slowly, or signalled that US attenuation was working, US transaction costs need not have reached the crossover at which the coup became the lower-cost option.

CLOSE

Whose bear is it?

THANK YOU

Questions?

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Variety Dynamics Axiom wording and numbering as of September 2026; see variety-dynamics.org for the current version.