

# Epiphenomenon@Trove

*Does internal institutional health drive external threat discourse?*

*A CAMS × Trove × V-Dem experiment in Australian press history*

Project summary · May 2026

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## Overview

**Epiphenomenon@Trove** tests a single proposition: that the way a society talks about foreign threats is shaped more by its own internal institutional condition than by anything the supposed threat is actually doing. The project combines 130 years of digitised Australian newspaper data with two independent institutional measurement systems and asks whether CAMS (Complex Adaptive Model System) node scores predict Sinophobic and Russophobic discourse frequency in the Australian press.

The word "epiphenomenon" is deliberate. An epiphenomenon is a secondary effect — something that appears to be caused by one thing but is actually produced by something else entirely. The hypothesis is that threat discourse is an epiphenomenon of domestic institutional stress and transformation, not a direct response to external behaviour.

This is a falsifiable claim. If CAMS scores predict discourse, the endogeneity hypothesis gains support. If they don't — or if the relationship is the same for both Sino and Russo discourse regardless of actual historical events — the hypothesis fails.

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## The Data

**Trove newspaper archive** (National Library of Australia): annual frequencies of Sinophobic discourse terms — "Yellow Peril", "China Threat", spy framing, and a composite threat measure — and Russophobic discourse terms, across 55 years of full coverage (1900–1954). Expressed as articles per million words to control for archive size.

**CAMS annual scores for Australia:** eight institutional nodes scored on a 0–20 scale — Helm (governance), Shield (security), Lore (normative framework), Stewards (resource and property management), Craft (productive capacity and rule of law), Hands (labour and material production), Archive (cultural memory and civil rights), and Flow (information and exchange). Node Values derived for 1900–1954 using the CAMS5 ensemble-mean series.

**V-Dem Country-Year Core v16** (Varieties of Democracy project, March 2026): 255 validated institutional indicators for Australia, 1789–2025, covering democratic processes, civil liberties, and judicial capacity. Used as an independent cross-validation instrument.

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## Three Experiments

Results were built in three layers, each using the prior layer's findings as a foundation.

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### Experiment 1 — Node-level regression.

Five analytical methods (time-detrended partial correlations, PCA, Ridge regression, Lasso regression, and theory-driven contrast regressions) were applied to the question: which CAMS nodes predict discourse frequency?

Two findings emerged consistently across all methods.

The first was unexpected. The strongest predictor of composite Sinophobic discourse was the Stewards node — resource and property management — not Shield (security). Stewards ranked first of eight nodes in univariate correlation (partial-r = 0.60) and was the only node to survive Lasso variable selection for the composite threat measure. Shield ranked seventh. This inverts the obvious "securitisation drives fear" hypothesis: the White Australia Policy, and the discourse that surrounded it, was fundamentally a property and labour protection regime, not primarily a security project.

*The node that most strongly predicts Sinophobic discourse is not the security apparatus. It is the management of land, labour, and property.*

The second finding was the phantom\_gap — the arithmetic difference between the Archive node value (cultural memory and civil rights) and the Lore node value (normative framework and social consensus). When civil rights expand faster than the normative social consensus can integrate them — when law outruns culture — Sinophobic discourse rises. The relationship is significant at  $p < 0.001$  for three of four Sinophobic discourse targets and holds across every robustness check applied.

Then the same analysis was run for Russophobic discourse. Every CAMS node returned a near-zero partial correlation. The CAMS state simply does not predict Russian threat framing in this period. Cross-referencing with history shows why: Russo discourse spikes at the Bolshevik Revolution (1917), Comintern activity in Australia (1920s), and the Cold War onset (post-1949) — specific historical events. Sino discourse has no comparable event anchor. It tracks internal institutional geometry alone.

More sharply: the phantom\_gap reverses sign for Russo discourse (coefficient +73,  $p = 0.010$ ). When **Archive leads Lore**, Russophobia falls. When **Lore leads Archive**, Russophobia rises. The exact opposite of the Sino pattern. Sino and Russo discourse are not the same anxiety expressed at different intensities toward different targets. They are structurally different phenomena with opposite institutional drivers.

### Experiment 2 — V-Dem indicator mapping.

The CAMS scoring procedure translates institutional evidence into numbers. V-Dem does the same thing independently, using a different method (expert surveys and a measurement model). If the two systems are measuring the same underlying reality, their outputs should correlate. Where they do, the specific V-Dem indicators that survive regularisation (Lasso) reveal which institutional dimensions the CAMS scorers were implicitly weighting.

Node	Max r	What V-Dem identifies
Archive	0.85	Freedom from slavery (top), polyarchy, civil liberties — a cumulative record of whose personhood the law recognises
Shield	0.81	Liberal democracy, rule of law, anti-clientelism — institutional constraint capacity, not coercive strength
Craft	0.64	Judicial independence, transparent laws, equality before the law
Stewards	0.43	Zero Lasso survivors — V-Dem Core has no property or fiscal management indicators

Hands	0.25	Zero Lasso survivors — labour markets entirely absent from V-Dem
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Table 1. Selected V-Dem mapping results. Stewards and Hands produce no robust V-Dem predictors.

Two mapping findings are worth highlighting. Archive's strongest V-Dem correlate is not a cultural heritage indicator — it is freedom from forced labour ( $r = 0.85$ ). In Australia's specific history, the Archive node tracks the legal recognition of personhood: the dismantling of Pacific Island labour indenture, the restrictions on Chinese bonded labour, and the progressive abolition of racialised labour regimes that were themselves the economic core of the White Australia Policy. The "archive" being built was a record of who counted.

Shield's V-Dem profile is equally striking: it correlates with liberal democracy and rule of law, not with military or police capacity. The obvious assumption — that a "Shield" node should track repressive apparatus strength — is wrong for Australia's historical trajectory, where institutional constraint and security development moved together.

Stewards and Hands — the two nodes with no V-Dem foundation — were scored from sources V-Dem does not cover: land tenure data, property law history, labour market statistics. This makes them methodologically opaque relative to V-Dem. That Stewards is also the strongest predictor of Sinophobic discourse is significant: the CAMS property-institutions dimension captures something the standard democracy literature does not measure, and it is precisely that dimension most tightly connected to the discourse.

### Experiment 3 — V-Dem indicator dispersion.

The third experiment asked whether institutional ambiguity — not just institutional level — predicts discourse. For each node, the eight top V-Dem correlates were treated as eight possible scorer configurations. Their annual standard deviation measures how much those configurations would have disagreed in a given year: high dispersion means the underlying indicators were pulling in different directions.

After removing shared time trends, two relationships held:

- **Craft indicator consensus negatively predicts China Threat ( $r = -0.862$  detrended).** When the rule-of-law indicators — judicial independence, transparent laws, gender equality in civil liberties — all agree with each other, China Threat discourse intensifies. China Threat is a discourse of legal confidence, not legal anxiety. The finding is independent of Craft node level (partial  $r = -0.818$ ), so it is not simply restating the node regression result.
- **Helm indicator ambiguity positively predicts Spy discourse ( $r = +0.631$  detrended).** When V-Dem's executive indicators diverge — as they did sharply across the five WWII years 1940–1944 — espionage framing surged. Constitutional uncertainty about what kind of executive authority the society possessed generated the spy genre.

*China Threat rises with institutional consensus. Spy discourse rises with institutional ambiguity. They are not different intensities of the same anxiety — they have opposite institutional signatures.*

## Did It Falsify the Model?

The answer is differentiated.

The  $v_1$  prediction — that the `praet_gap` (Shield minus Helm, measuring security-governance imbalance) was the operative mechanism — was not confirmed. Once node-level geometry is

introduced, the praet\_gap loses significance for most targets; the phantom\_gap dominates. The specific mechanism was falsified, not the broader framework.

The Russo endogeneity claim was falsified outright. Russophobic discourse in 1900–1954 tracks historical events, not the CAMS state. Near-zero partial correlations across all eight nodes are not a weak signal — they are an absence of signal, and the event-matching with 1917, the 1920s, and 1949 provides a positive alternative explanation.

The Sino endogeneity claim was supported and refined. The CAMS internal state predicts Sino discourse, the mechanism runs through property institutions and the civil-rights/normative-consensus gap, and the relationship survives every robustness test applied. Three independent analytical methods converge on the same structural picture.

*The model was not falsified. A specific version of the mechanism was corrected. The Russo finding is the strongest falsification result: the claim that internal institutional state drives all threat discourse is too broad. It holds for Sino discourse. It does not hold for Russo discourse in this period.*

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## What It Means

The finding that Sinophobic discourse is endogenous — generated from within Australian institutional development rather than in response to Chinese behaviour — has direct implications for how contemporary Sinophobia is understood and addressed.

First: the dominant nodes are Stewards and the phantom\_gap, not Shield. Policy narratives that frame Sinophobia primarily as a security phenomenon are addressing the wrong institutional dimension. The historical evidence points to property, labour, and the gap between legal advancement and cultural integration as the primary drivers.

Second: the Craft dispersion finding suggests that China Threat discourse rises from institutional confidence, not institutional weakness. If that pattern holds beyond the historical period studied, then "strengthening institutions to reduce threat perception" may be empirically backwards. The discourse appears to be generated by institutional strength.

Third: the Russo asymmetry is itself a finding, not just a robustness check. Different threat discourses have different structural substrates. Treating all foreign-threat discourse as a single phenomenon — amenable to the same explanatory model and the same policy responses — is not supported by the data.

The project is a proof of concept for applying CAMS as a predictive instrument in historical discourse analysis. The methodology is auditable (via the V-Dem mapping), the predictions are testable (the falsification criteria were specified in advance), and the results are replicable (five independent analytical methods converged on the same structure). The next step is extending the analysis beyond 1954 and testing whether the same node relationships hold in the contemporary period.

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## Data Sources and Methods

Dataset	Details
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<b>Trove newspaper archive</b>	National Library of Australia. Term-frequency search, articles-per-million normalisation. Coverage: 1900–1954 (55 years, n=55 annual observations).
<b>CAMS Australia scores</b>	Complex Adaptive Model System, 5-scorer ensemble mean. Eight nodes × 152 years (1875–2026). Node Values computed via CAMS-calc.
<b>V-Dem Core v16</b>	Varieties of Democracy project, March 2026. 255 indicators after filtering. Australia subset: 237 years (1789–2025).
<b>Methods</b>	Partial-r (OLS detrended); PCA; Ridge and Lasso regression (5-fold CV); theory-driven contrast regression; V-Dem Pearson mapping; indicator dispersion analysis.