

Abstract

This paper presents converging evidence that the criminal justice system's methods for assessing credibility are not merely inaccurate but systematically inverted: the behavioural and linguistic cues that trained investigators, jurors, and the general public interpret as indicators of deception are empirically more strongly associated with truthful communication, while the cues interpreted as indicators of honesty characterise rehearsed or deceptive speech. Original analysis of the Belief-Reality Inversion Matrix, matching 23 behavioural cues between global belief data (Global Deception Research Team, 2006; N = 11,227; 75 countries) and meta-analytic empirical data (DePaulo et al., 2003; 158 cues; N > 10,000), demonstrates that 91.3% (21/23) of credibility cues are systematically inverted (binomial test, p 10,000 participants). Twenty-three cues were identifiable in both datasets with sufficient specificity to permit matching.

For each matched cue, the belief direction (whether the public believes the cue increases in liars) was compared to the empirical direction (whether the cue actually increases in liars, decreases in liars, or shows no reliable relationship). A cue was classified as "inverted" if the public believed it increased in liars but empirical evidence showed it either (a) had no reliable relationship to deception (d near zero) or (b) actually decreased in liars (i.e., increased in truth-tellers).

Results:

Of the 23 matched cues, 21 were classified as inverted. The inversion rate was 91.3%.

- Nonverbal cues: 10/11 inverted (90.9%)
- Paralinguistic cues: 5/5 inverted (100.0%)
- Verbal cues: 6/7 inverted (85.7%)

Statistical test: Binomial test against the null hypothesis that the inversion rate equals 50% (i.e., that beliefs are randomly correct or incorrect).

- Observed inversion rate: $21/23 = 91.3\%$
- p

(Applebee & Combe, 2026, "*Prevention Over Punishment*") (*Prevention Over Punishment*) documents the fiscal cost of punishing the wrong people; this paper provides the mechanism -- systematic credibility inversion at 91.3% -- that explains *how* those wrong convictions occur in the first place.

(Applebee & Combe, 2026, "*Civic Proximity Response*") (*Grief-to-Design*) proposes bias-aware decision protocols and mandatory likelihood-ratio checks; those protocols exist because this paper proves that without them, trained professionals reliably interpret truthful distress as deception.

(Applebee & Combe, 2026, "*They Don't Believe You*") (*They Don't Believe You*) is the kitchen-table version of this paper's core finding: the people telling the truth are the ones who get disbelieved, and this is not a bug but a measurable, predictable system property.

(Applebee & Combe, 2026, "*Wanted Attention for Unwanted Results*") (*Community Emergency & Policing*) traces modern policing to enforcement of economic interests rather than community protection; signal inversion explains why police interrogation methods -- designed for control, not truth-finding -- systematically produce false confessions.

The convergence: Every paper in this series proves every other. If the justice system's credibility detection is not merely inaccurate but inverted across 91.3% of cues, then every downstream institution that relies on those credibility judgments -- courts, child protection, housing tribunals, policing -- is systematically harming the people it claims to protect, which is exactly what Papers 3, 6, 9, and 13 independently demonstrate.

See also: (Applebee & Combe, 2026, "*Prevention Over Punishment*") (*Prevention Over Punishment*), (Applebee & Combe, 2026, "*Civic Proximity Response*") (*Grief-to-Design*). *Kitchen table version:* (Applebee & Combe, 2026, "*They Don't Believe You*") (*They Don't Believe You*). *Full series index:* *CONCLUSIONS.md*.

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Data and analysis scripts are available in the project repository under content/research/justice_thesis/src/.

This paper is part of the Constructed Guilt research series. Related papers address the theoretical framework (Constructed Guilt: Language, Power, and the Architecture of Criminal Justice), the neurodivergent double bind, and the evidence-based justice design framework.