A Beginner's Guide to the Qualimetric AI Leadership Workbook by David Michael Boje

Purpose: How to Use Trafimow's Multiplicative Thinking, Skew-Normal Z-Scores, Vujade™ Communication Profiles, Concord Tesseract XYZA, 4th-Wave Grounded Theory, and True Storytelling® × 7 Antenarrative Bs in our speadsheet: • **Download the EXCEL SPREADSHEET** — updated Nov 20, 2026 (always this date until book for Routledge is done) — Download Excel (.xlsx) →

- **Slides for Boje's Nov 20, 2026 paper presentation** to Philosophy Investigations Conference — PDF →
- **Boje's Paper on Richard Rorty** that goes with the Nov 20, 2026 slides — PDF →
- **YouTube of Boje's presentation** to the Conference — Watch on YouTube →

1. What This Excel Workbook Does for You

If you have ever read a glossy corporate press release or watched a tech CEO keynote and wondered how to measure what is actually happening beneath the rhetoric—without reducing human communication to simplistic checkboxes—this Excel workbook was built for you. Instead of treating leadership speech acts as isolated quotes or adding up arbitrary survey points, the workbook turns real, dated public speech acts (123+ documented episodes across 10 global AI leaders) into a rigorous, auditable qualimetric system.

At its core, the workbook solves four practical research challenges for students, consultants, and scholars:

1. Grounded in Observable Speech Acts: Every rating is anchored in observable speech-act evidence—what a leader actually said, wrote, or enacted in a dated source—rather than guessing private psychological traits.

2. Anti-Dualist 1–7 Measurement: Instead of forcing false either/or binaries (such as 'Introvert vs. Extrovert' or 'Process vs. Outcome'), every construct gets its own independent 1-to-7 ruler so you can see where a leader flexes across capacities and where they have blind spots.

3. Non-Compensatory Multiplication: Following psychologist David Trafimow's multiplicative methodology, normalized scores (Score ÷ 7) are multiplied rather than averaged—meaning a single blind spot (a score of 1 or 2) visibly pulls down the overall index instead of being hidden by high hype elsewhere.

4. Fair Peer Comparison via Skew-Normal Z-Scores: Because multiplying bounded scores creates skewed distributions, the workbook automatically computes Cornish-Fisher Skew-Normal Z-scores so you can compare any episode or any AI leader against their peers in clean standard-deviation units (±1, ±2, or ±3 SD).

2. How to Use the Workbook: Step-by-Step Workflow

The workbook is organized into four core analytical tabs placed right at the front of the file, all dynamically linked to your master Evidence Log. You never have to manually recalculate averages, products, or Z-scores.

Step 1 — Log New Speech-Act Evidence: Open the 'Evidence Log' tab whenever you collect a new speech act (keynote, interview, essay, SEC filing, or regulatory hearing). Enter the Episode ID, Date, Leader Assessed, Organization Assessed, exact quote, and source citation.

Step 2 — Score Episodes Using the 1–7 BARS Rubrics: Navigate to the four scoring tabs—(1) Vujade™ Scoring, (2) Concord Tesseract XYZA, (3) Ch2 4th-Wave GT ODC (NVIDIA), and (4) True Storytelling & 7 Bs ODC. Each tab displays its complete 7-point Behaviorally-Anchored Rating Scale (BARS) at the top (Rows 5–12) so your scoring criteria are always visible right above your data.

Step 3 — Enter 1–7 Ratings (Never Zero): Enter integer ratings from 1 to 7 in the episode log rows (starting at Row 31 on the main tabs, or Row 16 on the NVIDIA chapter tab). Never enter 0—a score of 1 represents the floor ('Absent / Minimal') so multiplication penalizes blind spots without collapsing the entire equation to zero.

Step 4 — Read the Automated Leader Profiles & Z-Scores: Scroll up to Section 2 of each sheet to inspect the 10-Leader Summary Table. Excel automatically updates each leader's episode count (n), construct means, intermediate sub-indices, multiplicative index (M), Group Mean, Group SD, Skewness (γ_1), and Cornish-Fisher Skew-Normal Z-scores.

3. The Mathematical Engine: Trafimow Multiplication & Skew-Normal Z-Scores

In traditional social science, researchers add variables together ($Y = b_1X_1 + b_2X_2$). As David Trafimow demonstrates, addition cannot create genuinely new theoretical constructs—you cannot 'add' mass and velocity, whereas multiplying them ($p = m \times v$) creates momentum. Although qualitative 1–7 scales lack a physical absolute zero, Trafimow shows that dividing each score by its scale maximum (Score / 7) lets researchers 'pretend ratio-level measurement' on a bounded (0, 1] scale and multiply distinct constructs to test directional hypotheses and expose structural bottlenecks.

Formula 1: Vujade™ Grouped Multiplicative Index (M_Vujade)

$$M_{Vujade} = (I/7 \times E/7) \times (P/7 \times O/7) \times (V/7 \times A/7 \times K/7) = (I \cdot E \cdot P \cdot O \cdot V \cdot A \cdot K) / 823{,}543$$

Combines three intermediate sub-constructs: Temperament Pair (IE), Cognitive Pair (PO), and Sensory Triplet (VAK). Denominator $7^7 = 823{,}543$.

Formula 2: Concord Tesseract Leadership Index (M_XYZA)

$$M_{XYZA} = (X/7) \times (Y/7) \times (Z/7) \times (A/7) = (X \cdot Y \cdot Z \cdot A) / 2{,}401$$

Multiplies Transactional-Transformational (X), Power-Service (Y), Monophonic-Polyphonic (Z), and Special-Moral Answerability (A). Denominator $7^4 = 2{,}401$.

Formula 3: 4th-Wave Grounded Theory ODC Index (M_4WGT)

$$M_{4WGT} = (Abd/7) \times (Ded/7) \times (Ind/7) \times (Ref/7) = (Abd \cdot Ded \cdot Ind \cdot Ref) / 2{,}401$$

Multiplies Charles Sanders Peirce's self-correcting inquiry phases: Abduction (Abd), Deduction (Ded), Induction (Ind), and Refutation (Ref).

Formula 4: True Storytelling® × 7 Antenarrative Bs Matched-Pair ODC Index

`M_TS = Π(TS_k / 7)  |  M_7B = Π(B_k / 7)  |  M_ODC = SQRT(M_TS × M_7B)`

Computes the 7-factor multiplicative index for True Storytelling (TS1–TS7), the 7 Antenarrative Bs in locked order (Beneath → Beyond), and their geometric mean.

Formula 5: Cornish-Fisher Skew-Normal Z-Score (Native Excel Formula)

`z_std = (x - AVERAGE(range)) / STDEV.S(range)  |  Z_SN = z_std - (SKEW(range) / 6) × (z_std^2 - 1)`

Adjusts standard Gaussian Z-scores for empirical skewness (γ_1 = SKEW), preventing right-skewed multiplicative products from distorting ±1, ±2, and ±3 SD comparisons.

Why Unipolar 1–7 Scales Matter: How Multiplication Exposes Blind Spots

Because each construct is scored independently from 1 to 7, a leader can score high on both poles (e.g., I=6 and E=6), low on both, or sharply asymmetrical (O=7, P=2). Table 1 illustrates why an additive average hides critical weaknesses that Trafimow's multiplicative formula immediately catches:

Speech-Act Profile	7 Construct Scores (I, E, P, O, V, A, K)	Additive Mean (Sum/7)	Multiplicative M_Vujade	Analytical Takeaway
1. Balanced High ('Full-Range Flex')	(6, 6, 6, 6, 6, 6, 6)	6.00	0.33992	Strong across all 7 dimensions; no communicative blind spots.
2. Single Blind Spot (Neglects Process)	(6, 6, 1, 7, 6, 6, 6)	5.43	0.06609	Additive mean still looks high (5.43), hiding P=1. Multiplication cuts score by 81%.
3. Lopsided Hype ('Blind-Sided')	(2, 7, 2, 7, 7, 2, 2)	4.14	0.00666	Additive mean looks 'above average' (4.14), whereas M_Vujade drops by 98%.
4. Balanced Low ('Flat Boilerplate')	(2, 2, 2, 2, 2, 2, 2)	2.00	0.00016	Minimal communicative presence across all 7 dimensions.

Two-Level Unit of Analysis: Episodes vs. Leaders (Plus Within-Leader VAK SD)

The workbook maintains two distinct, hierarchically nested levels of analysis so you never conflate individual speeches with overall executive profiles: (1) the Episode Level (N = 123+ speech acts), which shows how extreme a single event is relative to the entire corpus, and (2) the Leader Level (N = 10 AI leaders), which averages each leader's episodes first and then computes Skew-Normal Z-scores across the 10 leaders. In addition, for the Sensory Triplet (Visual, Auditory, Kinesthetic), the sheet calculates each leader's Within-Leader VAK Standard Deviation (=STDEV.S(V, A, K)), showing how balanced or skewed a leader's sensory modalities are relative to one another.

4. Complete 7-Point Behaviorally-Anchored Rating Scales (BARS)

Every scoring tab in your workbook includes its full 1–7 behavioral anchor rubric directly above the data. Below are all four finalized rubrics for reference during coding and manuscript writing.

4.1 Vujade™ (VAKOG) 7-Point Behavioral Anchors (Tab: 'Vujade™ Scoring')

Score	Introvert (I)	Extrovert (E)	Process (P)	Outcome (O)	Visual (V)	Auditory (A)	Kinesthetic (K)
1	Absent/Impulsive: Reactive slogans; zero inward pause.	Absent/Withdrawn: Minimal public outreach or engagement.	Absent: Zero mention of steps, rules, or safeguards.	Absent: Purely procedural text; no strategic target.	Absent: No spatial, pictorial, or future-sight imagery.	Absent: Monologic speech; no listening or questioning.	Absent: Disembodied talk; zero reference to craft or labor.
2	Minimal: Brief nod to complexity without examining assumptions.	Minimal: Routine low-energy compliance statement.	Minimal: Passing nod to 'safety' without concrete steps.	Minimal: Vague allusion to improvement without targets.	Minimal: Isolated dead metaphor ('we see') without framing.	Minimal: Scripted Q&A reply without integrating voices.	Minimal: Generic action verb without physical grounding.
3	Emerging: Occasional reflective aside subordinated to PR.	Emerging: Moderate visibility (brief Q&A/release) without rallying.	Emerging: Names isolated steps; major pathways unspecified.	Emerging: States near-term deliverables without grand goal.	Emerging: Occasional reference to 'vision' or 'landscape.'	Emerging: Basic panel exchange staying on talking points.	Emerging: Mentions hardware/infrastructure in passing.
4	Moderate: Clear thoughtfulness or caveats in specific segments.	Moderate: Actively engages stakeholders & peers in forums.	Moderate: Outlines clear protocols or institutional conditions.	Moderate: Articulates concrete commercial/technical targets.	Moderate: Uses clear spatial metaphors (roadmaps, horizons).	Moderate: Genuine responsiveness, questioning & tone care.	Moderate: Grounds arguments in engineering craft & limits.
5	Strong: Substantive deliberated essays; invites pause & inquiry.	Strong: High-energy advocacy & multi-platform mobilization.	Strong: Methodical step-by-step sequence, evidence & controls.	Strong: Anchors discourse in bold breakthroughs & impact.	Strong: Vividly paints blueprints & panoramic scenarios.	Strong: Centers dialogue, debate & explicit counter-voices.	Strong: Richly tactile; emphasizes prototyping & factory reality.
6	Very Strong: Sustained intellectual depth & unhurried analysis.	Very Strong: Charismatic stage/media presence energizing markets.	Very Strong: Rigorous safety gates & verification even if slower.	Very Strong: Mobilizes around moonshots (AGI, GW scale).	Very Strong: Masterful visual storytelling, demos & system maps.	Very Strong: Deeply dialogic; mutual listening & vocal repair.	Very Strong: Viscerally embodied; physical labor & urgency.
7	Exemplar: Thoroughly contemplative inquiry over spectacle.	Exemplar: Relentless outward mobilization across global forums.	Exemplar: Exhaustively process-anchored in verifiable rules.	Exemplar: Thoroughly outcome-driven around grand end-states.	Exemplar: Constructive visual-architectural paradigm.	Exemplar: Thoroughly auditory-dialogic Socratic inquiry.	Exemplar: Grounded in direct physical immersion & action.

4.2 Concord Tesseract Leadership XYZA 7-Point Anchors (Tab: 'Concord Tesseract XYZA')

Score	X: Transactional ↔ Transformational	Y: Power-Over ↔ Serving Others	Z: Monophonic ↔ Polyphonic	A: Special Accountability ↔ Moral Answerability
1	Transactional exchange: Directions, output targets & compliance dominate; bounded to immediate return.	Power concentrated: Decision rights & benefits concentrated in leader/firm; costs shifted to others.	Single authorized voice: One official account governs; competing accounts excluded.	Special/role-bound accountability: Bounded to legal liability, job role, or institutional alibi.
2	Compliance-centered: Efficiency & control primary; incentives refined without purpose redesign.	Solidarity without service: Language of inclusion appears, but resources & authority stay concentrated.	Dissent excluded: Alternative voices acknowledged symbolically without entering deliberation.	Defensive role compliance: Satisfies formal reporting minimums without owning moral choices.

Score	X: Transactional ↔ Transformational	Y: Power-Over ↔ Serving Others	Z: Monophonic ↔ Polyphonic	A: Special Accountability ↔ Moral Answerability
3	Limited development: Task exchange central, with minor training/consultation added.	Consulted, not empowered: Stakeholders heard, but have little effect on decisions or authority.	Filtered plurality: Perspectives solicited, but leaders filter/narrow them; minimal influence.	Emerging moral awareness: Acknowledges stakeholder impact in speech; repair remains provisional.
4	Mixed transaction/development: Performance balanced with stated developmental purpose.	Partial shared service: Some stakeholder input alters a decision; limited resources provided.	Voices considered: Multiple perspectives represented accurately while official account leads.	Situated moral ownership: Owns unique participation (ne-alibi v bytii) without delegating blame.
5	Purposeful redesign: Purpose & development guide material changes to products or governance.	Material service: Documented action materially serves affected others via access or protections.	Voices shape options: Affected voices alter options or priorities; disagreement stays visible.	Enacted repair & commitment: Commits concrete organizational resources to repair harm.
6	Systemic transformation: Operating model & accountability redesigned for system consequences.	Shared power and burden: Decision rights shared; firm repairs harms at measurable cost.	Dialogic revision: Competing perspectives revise decisions with follow-up; dissent preserved.	Systemic moral intervention: Reshapes institutional rules to prevent recurring harm.
7	Sustained shared transformation: Revisable over time; long-horizon stakeholder value rules.	Institutionalized service: Sustained in governance; stakeholders co-shape decisions & equity.	Institutionalized polyphony: Decision architecture embeds ongoing multi-voiced co-inquiry.	Sustained answerability: Enduring non-alibi moral stewardship across lived consequences.

4.3 4th-Wave Grounded Theory ODC 7-Point Anchors (Tab: 'Ch2 4th-Wave GT ODC (NVIDIA)')

Score	Abduction (Abd): Anomalies & Bets	Deduction (Ded): Material If–Then Mapping	Induction (Ind): Multi-Voiced Field Testing	Refutation (Ref): Falsification & Repair
1	Petrified Script: Repeats rehearsed PR tropes; ignores breakdowns or anomalies.	Abstract/Unmoored: Sweeping promises with zero material or budget mapping.	Unilateral/Untested: Asserts claims from executive suite without checking lived reality.	Defensive/Closed: Suppresses or uses NDAs/spin to block disconfirming stories.
2	Minimal: Notes a minor hiccup in passing, assimilating it into old routines.	Minimal: Vague allusion to 'scaling' without concrete if–then operational mapping.	Minimal: Relies on selective internal anecdotes rather than cross-functional inquiry.	Minimal: Formal disclaimer with no genuine openness to being proven wrong.
3	Emerging: Notes market/technical shift, generating a narrow conventional explanation.	Emerging: Identifies isolated resource implications (e.g., power) without system map.	Emerging: Consults immediate executives or select customers, omitting marginalized voices.	Emerging: Admits minor past missteps after external pressure without falsification audit.
4	Moderate/Situational: Surfaces real friction/workarounds & proposes plausible hypothesis.	Moderate/Situational: Maps clear if–then consequences across budgets & workflows.	Moderate/Situational: Gathers structured multi-department feedback to test patterns.	Moderate/Situational: Explicitly invites red-teaming on specific assumptions.
5	Strong: Invites unpolished living stories of surprise to generate bold antenarrative bets.	Strong: Co-designs small testable experiments tracing tools, labor & ecology.	Strong: Conducts iterative conversational field rounds across engineers, workers & neighbors.	Strong: Actively hunts for edge cases & counter-stories that break consensus.
6	Very Strong: Models Peircean fallibilism—treating strategies as provisional hypotheses.	Very Strong: Rigorously traces 2nd- and 3rd-order supply-chain & ecological consequences.	Very Strong: Sustains polyphonic story circles across competitors, regulators & public.	Very Strong: Rewards whistleblowers & refutation audits that force strategic pivots.

Score	Abduction (Abd): Anomalies & Bets	Deduction (Ded): Material If–Then Mapping	Induction (Ind): Multi-Voiced Field Testing	Refutation (Ref): Falsification & Repair
7	Exemplar: Institutionalizes continuous antenarrative inquiry from every breakdown.	Exemplar: Complete ontological grounding—every bet paired with falsifiable tests.	Exemplar: Full-ecosystem conversational inquiry continuously revising shared practices.	Exemplar: Self-correcting Peircean loop—refutation audits overturn petrified plots.

4.4 True Storytelling® (1–7) × Antenarrative 7 Bs (Beneath → Beyond) Matched-Pair Anchors

In accordance with your canonical ODC sequence, the 7 Antenarrative B-processes are locked in the exact order Beneath → Before → Bets → Being → Becoming → Between → Beyond so they align 1-to-1 as matched pairs with Principles 1 through 7 of True Storytelling® (Tab: 'True Storytelling & 7 Bs ODC'):

Score	Pair 1: TS1 Truth × B1 Beneath	Pair 2: TS2 Make Room × B2 Before	Pair 3: TS3 Plot × B3 Bets	Pair 4: TS4 Timing × B4 Being	Pair 5: TS5 Help Along × B5 Becoming	Pair 6: TS6 Staging × B6 Between	Pair 7: TS7 Reflecting × B7 Beyond
1	Alibi/Concealed: Hides behind PR istina; conceals hidden labor & burdens.	Erased Before: Presents plot as inevitability; erases prior room-trails.	Unaccountable Bet: Grandiose hype shifting downside risk to the public.	Perpetual Deferral: Keynote performance replaces present lived harm.	Finalized/Future Alibi: Locks users as specimens; defers safety to future.	Monologic Stage: NDAs, keynotes & guardrails block counter-words.	Inward/Solipsistic: Evaluates value solely by share price or compute scale.
2	Minimal Compliance: Boilerplate disclaimers; tokenistic supply-chain nod.	Flattering Myth: Curates selective backstory omitting dependencies.	Safe Scenario: Detached probabilities with zero executive skin in game.	Abstracted Distance: Speaks of workers & neighbors as aggregate metrics.	Linear Rollout: Top-down blueprint treating improvisation as defiance.	Controlled Q&A: Curated demos simulating dialogue without challenge.	Instrumental Ethics: Invokes societal values solely for brand/compliance.
3	Emerging Candor: Notes power/water limits without giving voices room.	Partial Disclosure: Names recent precursors; deeper debts stay opaque.	Conditional Forecast: Near-term milestones with escape clauses.	Selective Presence: Engages internal operations; defers external reality.	Limited Piloting: Narrow A/B testing within commercial boundaries.	Informational Artifacts: Model cards inform without two-way revision.	Compliance Review: Assesses mandated ESG metrics without systemic depth.
4	Structured Visibility: Owns trade-offs & surfaces labor/contract dependencies.	Situational Ownership: Acknowledges prior commitments & starting constraints.	Explicitly Staked Wager: Concrete future bets with milestones & uncertainty.	Grounded Attention: Enters living web attending to present worker/local reality.	Iterative Revision: Treats strategic plans as revisable via feedback.	Two-Way Forum: Red-teaming & community boards enter critics into record.	Stakeholder Reflection: Weighs decisions against obligations to neighbors.
5	Active Excavation: Exposes invisible data labor & grid/water burdens.	Non-Alibi Naming: Owns exact historical place (ne-alibi v bytii).	Pravda Commitment: Stakes answerable wager (postupok) with resources.	Participative Thinking: Acts from inside lived event (uchastnoe myshlenie).	Stopping Harm Today: Halts harmful practices today rather than deferring.	Bakhtinian Outsideness: Honors vne-nakhodimost' to expose blind spots.	Systemic Value Audit: Weighs human, org & ecological value together.
6	Polyphonic Co-Presence: Underground stories co-author strategic rules.	Contested Multi-Origin: Preserves competing historical claims & voices.	Shared-Risk Stewardship: Enforceable stop-rules, pause triggers & governance.	Present-Tense Solidarity: Centers immediate care for neighbors & democracy.	Co-Constituted Becoming: Keeps architecture open (nezavershennost').	Mutual Co-Storying: Together-telling where dissent alters priorities.	Regenerative Covenant: Enacts concrete ecological/social repair at cost.
7	Exemplar Beneath Truth: Audits & publishes full material/labor provenance.	Exemplar Before Accountability: Answers for full historical & somatic trail.	Exemplar Answerable Wager: Every bet is a binding pravda deed with restitution.	Exemplar Lived Being: Sustains unalienated ontological care in the present.	Exemplar Living Becoming: Self-correcting experimentation renews the firm.	Exemplar Dialogic Stage: Every artifact sustains polyphonic encounter.	Exemplar Beyond Stewardship: Governs in answerable service to living planet.

5. Session Reference Tables: 10 AI Leaders Vujade™ Z-Score Benchmarks

Table 6 reproduces the 10-leader Vujade™ benchmark results derived from your 123 coded speech-act episodes, showing each leader's Mean M_Vujade, Standard Deviation Z-score, Temperament (I–E) Net Z-score, Cognitive (P–O) Net Z-score, and Sensory (K–A–V) Triplet SD:

Leader / Organization	n	Mean M_Vujade	Z_M	I–E Pair Net Z (Z_E - Z_I)	P–O Pair Net Z (Z_O - Z_P)	K–A–V Triplet SD
Larry Ellison / Oracle	9	0.0048	+2.04	+2.34 (Extroverted)	+1.15 (Outcome)	1.55 (High Imbalance)
Mark Zuckerberg / Meta	9	0.0039	+1.18	-2.20 (Introverted)	-0.08 (Balanced)	1.05 (Moderate-High)
Liang Wenfeng / DeepSeek	8	0.0030	+0.35	+0.33 (Balanced)	+2.39 (Outcome)	1.46 (High Imbalance)
Dario Amodei / Anthropic	10	0.0030	+0.30	-1.44 (Introverted)	-3.14 (Process)	0.54 (Balanced)
Elon Musk / xAI	8	0.0026	-0.08	+1.12 (Extroverted)	+1.20 (Outcome)	1.13 (Moderate-High)
Sam Altman / OpenAI	12	0.0022	-0.42	+0.06 (Balanced)	-2.46 (Process)	0.38 (Balanced)
Sundar Pichai / Google–Alphabet	7	0.0022	-0.48	+0.04 (Balanced)	-0.33 (Balanced)	0.49 (Balanced)
Andy Jassy / Amazon	10	0.0018	-0.83	-2.26 (Introverted)	+1.48 (Outcome)	0.37 (Balanced)
Jensen Huang / NVIDIA	18	0.0017	-0.95	+0.01 (Balanced)	-0.24 (Balanced)	0.37 (Balanced)
Satya Nadella / Microsoft	13	0.0015	-1.11	+1.98 (Extroverted)	+0.04 (Balanced)	0.65 (Balanced)

Chapter-by-Chapter ODC Modularity

As you write subsequent chapters of your book, you can duplicate either the 'Ch2 4th-Wave GT ODC (NVIDIA)' tab or the 'True Storytelling & 7 Bs ODC' tab, filter 'Evidence Log' to the focal chapter's leader (such as Sam Altman / OpenAI, Dario Amodei / Anthropic, or Elon Musk / xAI), and apply the exact same 1–7 behaviorally-anchored scoring, Trafimow multiplicative normalization (Score ÷ 7), and Cornish-Fisher Skew-Normal Z-score formulas.