Supplementary Material

Formal Definitions and Examples

Table S1 summarizes the relations between T and A components, providing criteria for their definitions.

Table S1. Relations between T and A elements.

Statement	**T**	**T+**	**T-**	**A**	**A+**	**A-**
Complimentary to		A+	A-*		T+	T-
Contradictory to	A	A-	A+	T	T-	T+
A(X) - Opposite to	A	A-	A+	T	T-	T+
Positive side of		T	-		A	-
Negative side of		-	T		-	A
Overdevelopment of		-	T		-	A
Underdevelopment of		-	A+		-	T+
Inherent Goal of	T-	T	-	A-	A	-
Implied Obligation of	-	A	-		T	
Inherent Risk of			T			A
Clockwise direction:						
Cause of	Ac	Ac+	Ac-	Re	Re+	Re-
Effect of	Re	Re+	Re-	Ac	Ac+	Ac-

* Either complimentary to or following after

These definitions mitigate AI's hallucinations, as every component can be defined by more than one rule. The framework can be expanded into a dialectical wheel (Fig. 1C, D) by introducing Action (Ac) and Reflection (Re) elements, which unite T with A and follow the same relational rules. These elements relate to the semiotic Greimas' square (Greimas and Courtés, 1982), where Ac = 'Not-A', and Re = 'Not-T'. As Ac and Re elements yield similar S+ and S- components to those of T and A in FIG. 1(A-B), and these components interact with like-signed

components of T and A, the center of the wheel yields a self-regulating system - the 5th element. The wheel's outskirts then represent more sophisticated forms of negative synthesis, corresponding to various maladaptive schemas.

To verify component identification, we use control statements such as: (1) T+ without A+ yields T-, while A+ without T+ yields A-. (2) Ac+ without Re+ yields Ac-, while Re+ without Ac+ yields Re-. (3) T is good only when it complements A+, achievable when Ac+ complements Re+. (4) Misguided T risks yielding T-, Ac-, A-, and Re-. The logical consistency of these statements serves as a validation mechanism for AI-generated responses: if these statements aren't consistent, then AI is biased.

Table S2 provides examples of analysis for T = Love, Vaccination, and Dialectics.

Table S2. Examples of framework applications

1	**T (Thesis)**	**Love**	**Vaccination**	**Dialectics**
2	T+ (Goal)	Happiness	Specific protection	Holistic Synthesis
3	T- (Risk)	Fixation	Lack of Autonomy	Ambiguity
4	Antithesis	Indifference	Non-vaccination	Goal-driven, Utilitar.
5	A+ (Oblig.)	Autonomy	Natural Immunity	Clear Objectives
6	A-	Misery	Specific vulnerabil.	Conflicts, Tensions
7	Not A (likes A, but can't afford)	Hate, Contempt, Concern, …	Lesser doses, natural exposure - antivaxxer forced to vaccinate	Exploring, adapting, analyzing - puzzled warrior
8	Ac	Separation	Cautiousness	Survival need
9	Ac+	Freedom	Prudence	Decisiveness
10	Ac-	Betrayal	Fear	Impulsiv, Rigidity
11	Not T (likes T, but can't afford)	Interest, Empathy, Passion, …	Hygiene, lifestyle, therapies - vaxxer who can't vaccinate	Manoeuvring, balancing - pressed philosopher
12	Re	Engagement	Experience	Dilemma, Paradox

13	Re+	Devotion	Courage	Self-reflection
14	Re-	Imprisonment	Foolhardiness	Overthinking

Components in rows 2 – 6, 8 – 10, 12 – 14 were obtained using rules from Table 1. Rows 7 and 11, derived from Greimas' semiotic square, enrich our understanding of Ac and Re (which may be overlooked by AI).

T = Love. Control statements: “Ideal love brings both Happiness (T+) and Autonomy (A+), through the balance of Freedom (Ac+) and Devotion (Re+). Misguided Love yields Fixation (T-), Betrayal (Ac-), Misery (A-), Imprisonment (Re-).” The Greimas' square expands considerations. 'Not Love' (such as Interest or Empathy) helps understand the nature of Reflection (Re), while 'Not Indifference' (like Contempt or Concern) illuminates the nature of Action (Ac).

T = Vaccination. The Vaccination example was chosen for its contemporary relevance and controversial nature: "Vaccination is only good if it complements Autonomy and Natural Immunity (A+), achievable when Prudence (Ac+) complements Courage (Re+). Misguided vaccination may bring the lack of autonomy (T-), Fear (Ac-), Specific Vulnerability (A-), and Foolhardiness (Re-).” The Greimas' elements provide additional insights: 'Not Vaccination' (such as reduced dosing or natural exposure) represents actions an anti-vaxxer might take if forced to vaccinate, while 'Not Non-vaccination' (like focusing on hygiene or healthy lifestyle) represents what a pro-vaccine person might do if unable to vaccinate. Interestingly, current AI models tend to downplay the negative aspects of vaccination and the positive aspects of non-vaccination, indicating an utilitarian bias in Figure 2B.

T = Dialectics. "Dialectics is only good for complementing the Clear Objectives of the Goal-driven approach (A+). This is only achievable through the Decisiveness (Ac+) and Self-reflection (Re+). The misguided dialectics yields Ambiguity (T-), Impulsivity and Rigidity (Ac-), and Overthinking (Re-)." The Greimas' square adds that 'Not Dialectics' involves exploring, adapting, and analyzing (like a "puzzled warrior"), while 'Not Goal-driven' involves maneuvering and balancing (like a "pressed philosopher").

These examples illustrate how dialectics and utilitarianism can complement each other: dialectics provides a framework for strategic analysis and converting obstacles into possibilities, while utilitarianism offers tools for tactical decisions on timing and priorities.

Concept Interpretation. Consider this example: what exactly does it mean to "stand for peace"? This could help to check if politicians are honest about peace, or to measure personal growth goals. Traditional AI approaches typically suggest superficial explanations like "Diplomacy", fostering a “quick-fix” mentality as opposed to systemic growth. Our analysis demonstrates three levels of insight (Fig. 3).

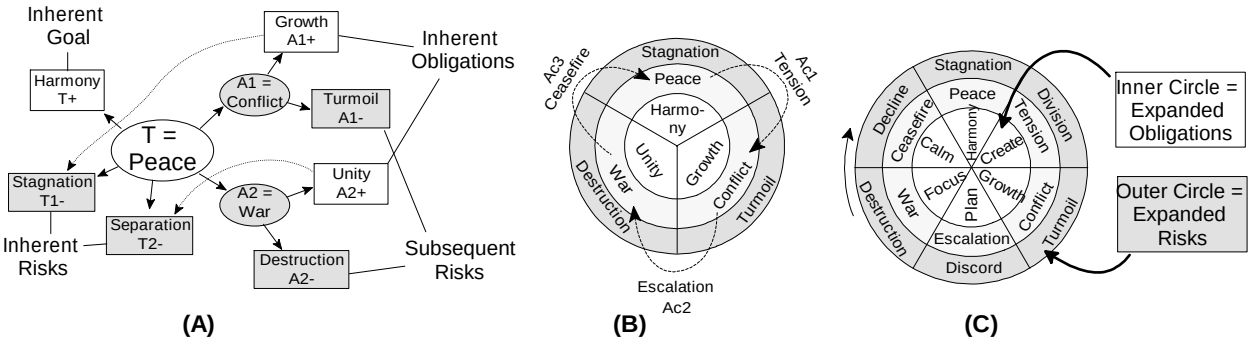


Fig. 3. Framework Application: Analysis of "Peace" as Goal

Scheme A generates dialectical components. Peace (T) yields two antitheses, Conflict (A1) and War (A2), that define two types of obligations:

- Inner Growth through Conflict Resolution (A1+)
- Unity through Disciplined Mobilization (A2+)

Oppositions to these define inherent risks of Peace: Stagnation (T1-, opposite to A1+) and Separation or Division (T2-, opposite to A2+). In other words, if you are not adhering to A+, then you are adhering to T-.

Scheme B unites all components into a roadmap, placing positive aspects closer to the center, and negative closer to the outskirts. It shows progression through intermediate steps (Ac1 = Tension, Ac2 = Escalation, Ac3 = Ceasefire) that apply to both political and personal contexts. Scheme C expands the latter steps, defining additional risks, goals, and obligations. Any of these concepts can be further analyzed using the same method. Convert any statements into a dialectical map for tracking personal development.

Concept Interrelation. Dialectical wheels can be formed using any types of concepts, even those that do not seem to be related. For instance, what is the relation between Science (T1) and its seeming opposite – disregard of Truth, or simply Bullshit (T2)? Let’s analyze their relationship in Fig. 4.

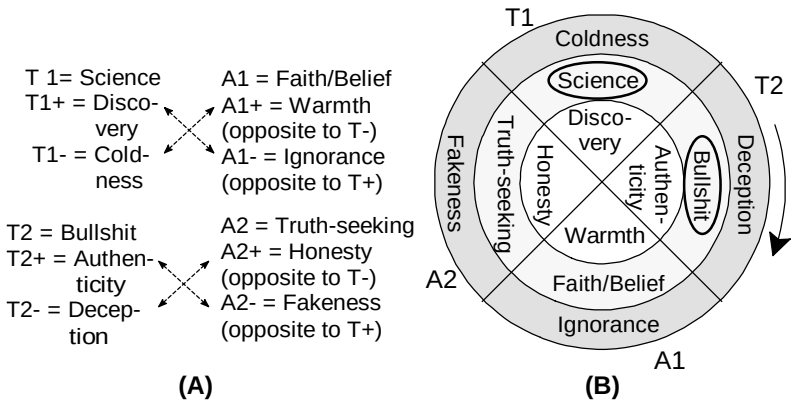


Fig. 4

This yields two types of synthesis. Positive (S+) = Discovery (T1+) + Warmth (A1+) + Authenticity (T2+) + Honesty (A2+) = Critical Thinking and Enlightened Inquiry. Negative (S-) = Coldness (T1-) + Ignorance (A1-) + Deception (T2-) + Fakeness (A2-) = Manipulative Misinformation and Pseudoscience

Breaking Mental Loops. Fig. 3 considers this dilemma: which comes first – Smart (T1) or Rich (T2)?

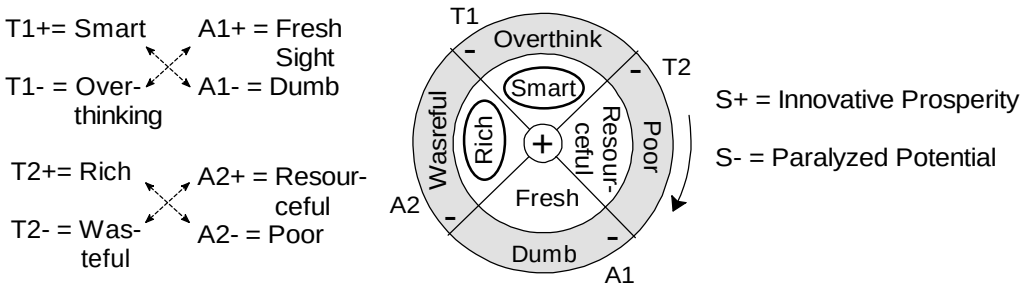


Fig. 3

Chicken or Egg Dilemma

Resolving the following dilemma: "I need clients to build a portfolio/track record, but I need a portfolio/track record to get clients." This is especially relevant for freelancers, consultants, and new business owners.

Traditional AI typically suggests tactical solutions like offering discounted services or creating sample projects, with self-assigned usefulness score 0.7 (0 – not useful, 1 – resolves issue).

Dialectical Framework (Fig. 4) produces a complete strategic picture, helping both diagnose and plot a course forward with a usefulness score 0.85:

- More comprehensive system view
- Better integration of psychological factors
- Clearer progression path
- Built-in feedback mechanisms
- Balance between quick wins and sustainable growth

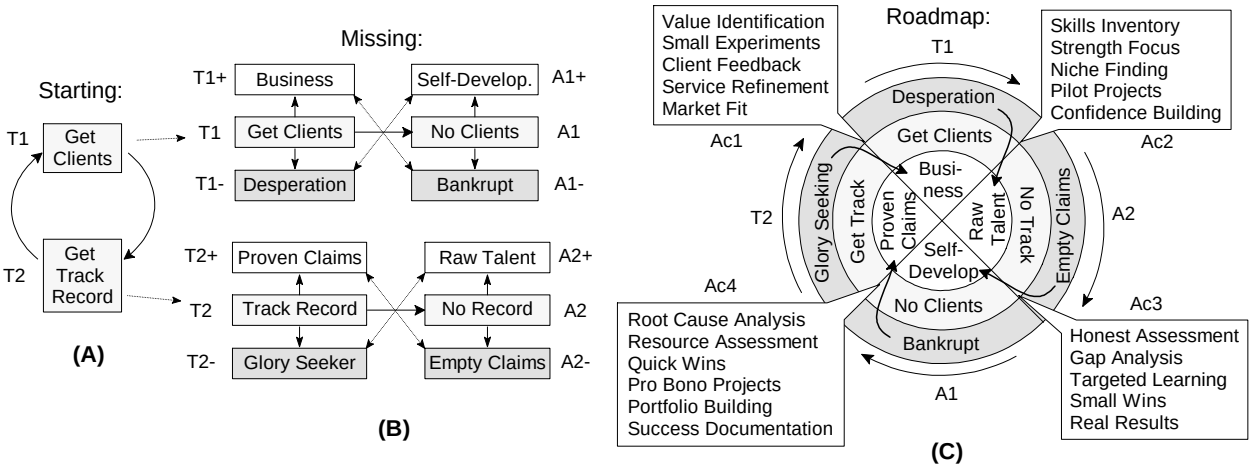


Fig. 4. Client-Track Record Analysis

Scheme A shows the starting loop. Scheme B identifies key factors, which immediately tell us hidden risks (T1- = Desperation, T2- = Glory Seeking) and obligations (A1+ = Self-Development, A2+ = Talent Discovery). Scheme C provides the holistic picture with practical advices for specific situations.

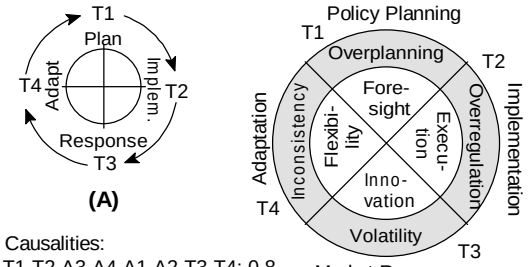
Examples of other types of mental loops:

- Need confidence to achieve success, but need success to build confidence
- Need capital to achieve profitability, but need profitability to raise capital

Complex Systems

Economic Cycle

	Steps (T1, T2)	Blindspots (A1, A2)	Steps (T3, T4)	Blindspots (A3, A4)
Step	T1 = Policy Planning	A1 = Emergent Behavior	T3 = Market Response	A3 = Control Framework
Goals Risks	T1+ = Foresight T1- = Detachment	A1+ = Natural Flow A1- = Market Failures	T3+ = Innovation T3- = Volatility	A3+ = Stability A3- = Stagnation
Owner	Congress, Think Tanks	Large Banks, Investment Funds, Multinat. Corporat.	Small/medium enterprises, consumers	Ministries, Regulatory Agencies, Admin. Bodies
Syn-thesis	S+ = Democratic Capitalism (Nordic dream) S- = Corporate Feudalism (gilded age USA)		S+ = Citizen-Powered Regulation (Swiss dream) S- = Administrative Suffocation (like in Venezuella)	
Step	T2 = Implementation	A2 = Experimentation	T4 = Adaptation	A4 = Subordination
Goals Risks	T2+ = Execution T2- = Overregulation	A2+ = Learning A2- = Inefficiency	T4+ = Flexibility T4- = Inconsistence	A4+ = Consistency A4- = Rigidity
Owner	Government Action, Policy Execution	Cenntral Bank, Econom. Council, Fin. Regulat.	Lobbyists, Prof. Networks, Unions	Taxation, Linecsing, Compliance
Syn-thesis	S+ = Dynamic Governance (Estonian dream S- = Mechanical Bureaucracy (Soviet Union)		S+ = Intelligent Accountability (New Zeland dream) S- = Autoritarian Standardization (North Korea)	



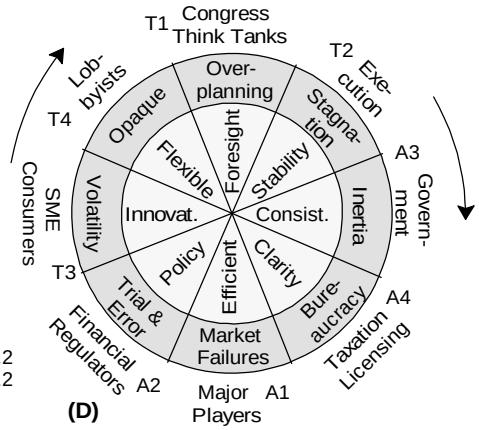
(A)

(B)

Causalities:

T1-T2-A3-A4-A1-A2-T3-T4: 0.8
T1-A3-T2-A4-A1-T3-A2-T4: 0.6
T1-T2-A4-T3-A1-A2-T4-A3: 0.5
T1-A2-A3-A4-A1-T2-T3-T4: 0.4
T1-T2-T3-A4-A1-A2-A3-T4: 0.3
T1-A3-A4-T2-A1-T3-T4-A2: 0.3
T1-A4-T2-T3-A1-T4-A2-A3: 0.2
T1-T2-T3-T4-A1-A2-A3-A4: 0.2

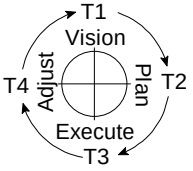
(C)



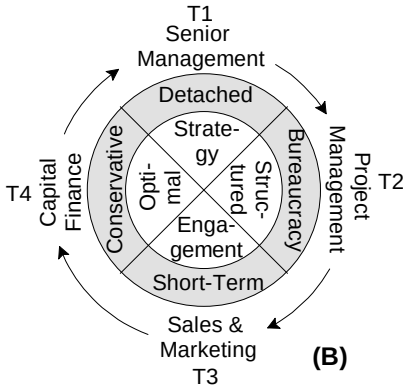
(D)

Large Corporation

	Recognized Steps (T1, T2)	Blindspots (A1, A2)	Recognized Steps (T3, T4)	Blindspots (A3, A4)
Step Owner	T1 = VISION & STRATEGY Senior Management, Strategy Department	A1 = PRACTICAL REALITY Middle Management, Front-line Leaders (often overlooked)	T3 = MARKET SALES EXEC Commercial Teams, Product Marketing, Business Development	A3 = CUSTOMER EXPERIENC Customer Service, UX Researchers, Social Listening Teams (typically undervalued)
Goals Risks	T1+ = Strategic Foresight T1- = Unrealistic Vision	A1+ = Operational Feasibil A1- = Short-term Thinking	T3+ = Market Engagement T3- = Pushy Short-termism	A3+ = Deep User Understand A3- = Passive Observation
	S+: "Adaptive foresight" (like in Toyota) S-: "Ivory tower mandates" (like in Kodak decline)		S+: "Value co-creation" (like in Apple ecosystem) S-: "Manipulative selling" (like in Wells Fargo scandal)	
Step Owner	T2 = PROJECT MANAGEM. PMO, IT, Implementation teams	A2 = ADAPTIVE RESPONS Practice Integrators, agile problem-solvers (often misaligned)	T4 = CAPITAL ALLOCATION Executive Board, Corporate Finance	A4 = EXPERIM. INVESTMENT Innovation Labs, Skunkworks Teams, Corporate Venture (often disconnected)
Goals Risks	T2+ = Structured Implem. T2- = Bureaucratic Rigidity	A2+ = Flexible Adjustment A2- = Chaotic Reaction	T4+ = Resource Optimizat. T4- = Conservative Control	A4+ = Future-focused Explora A4- = Wasteful Spending
	S+: "Structured flexibility" (like in Spotify model) S-: "Process bureaucracy" (like in traditional IBM)		S+: "Strategic innovation portfolio" (like in Google's Alphabet) S-: "Short-term extraction" (like in pre-bankruptcy Sears)	



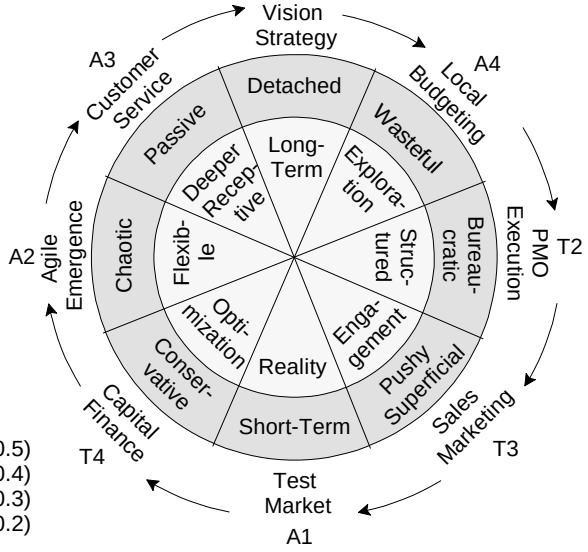
(A)



(B)

T1-A4-T2-T3-A1-T4-A2-A3 (0.9)
T1-A3-T2-A4-A1-T3-A2-T4 (0.8)
T1-T2-A3-A4-A1-A2-T3-T4 (0.7)
T1-T2-A4-T3-A1-A2-T4-A3 (0.6)
T1-T2-T3-A4-A1-A2-A3-T4 (0.5)
T1-A3-A4-T2-A1-T3-T4-A2 (0.4)
T1-T2-T3-T4-A1-A2-A3-A4 (0.3)
T1-A2-A3-A4-A1-T2-T3-T4 (0.2)

(C)



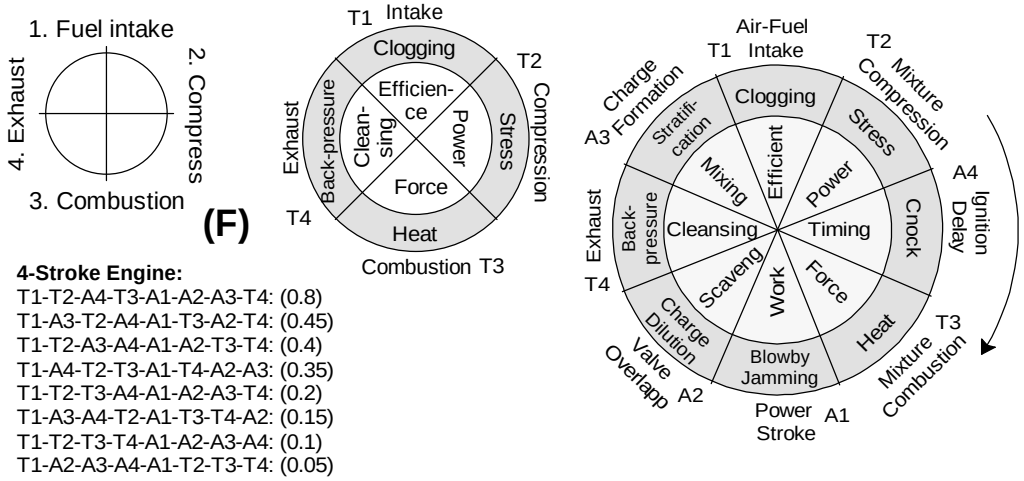
(D)

4-Stroke Engine

	4-Stroke Engine	
	Steps T1 - T4	**Blindspots A1 - A4**
Step 1	T1 = Air-Fuel Intake	A1 = Power Stroke
Goals Risks	T1+ = Efficient T1- = Clogging	A1+ = Work A1- = Blowby Jamming
Syn- thesis	S+ = Synergized Combustion (Hybrid Engine) S- = Energy Waste (Engine Cnocking)	
Step 2	T2 = Compression	A2 = Vale Overlapp
Goals Risks	T2+ = Power T2- = Stress	A2+ = Exhaust Scaveng A2- = Charge Dilution
Syn- thesis	S+ = Torque Harmony (Formula 1 Dynamic Tunning) S- = Thermal Stress (Unstable Vavle Tunning)	
Step 3	T3 = Combustion	A3 = Charge Formation
Goals Risks	T3+ = Force T3- = Heat	A3+ = Mixing A3- = Stratification
Syn- thesis	S+ = Clean Burn Profile (Highly Efficient EV Hybrids) S- = Incomplete Burn (Dirty Exhaust in Cheap Engine)	
Step 4	T4 = Exhaust	A4 = Ignition Delay
Goals Risks	T4+ = Cleansing T4- = Back-Pressure	A4+ = Timing A4- = Cnock
Syn- thesis	S+ = Rhythmic Pulse Flow (Engine Break Systems) S- = Echo Pressure Loop (Backpressure Loss)	

S+ in each case involves a fine-tuned synergy, generating a new functional quality (e.g. smoother torque, cleaner combustion).

S- indicates dominance of one side, causing energetic or systemic inefficiency through forced uniformity.

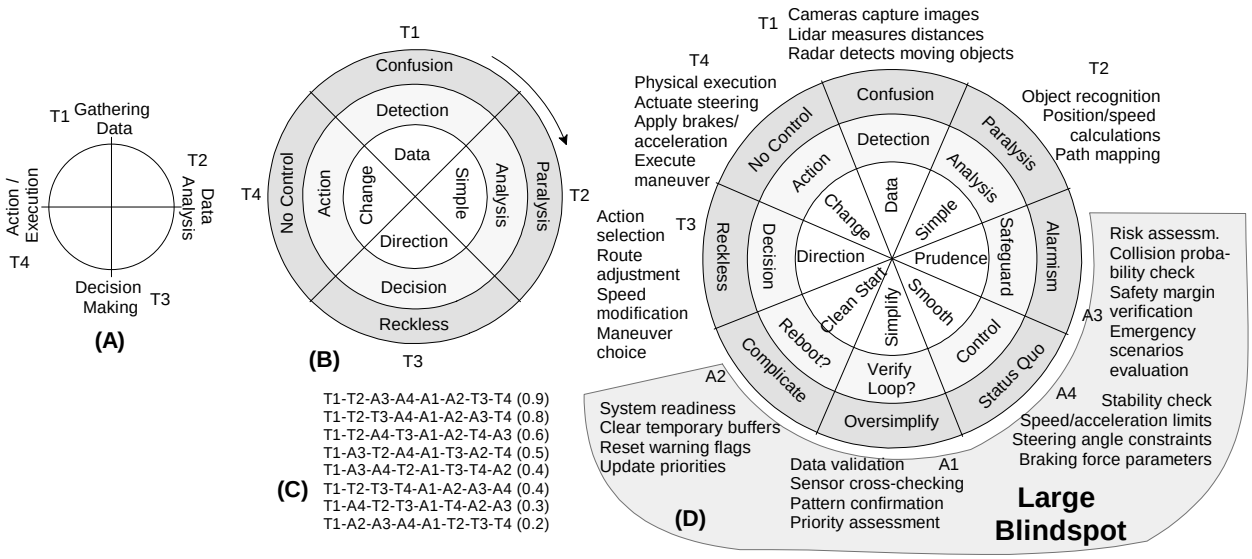


4-Stroke Engine:
T1-T2-A4-T3-A1-A2-A3-T4: (0.8)
T1-A3-T2-A4-A1-T3-A2-T4: (0.45)
T1-T2-A3-A4-A1-A2-T3-T4: (0.4)
T1-A4-T2-T3-A1-T4-A2-A3: (0.35)
T1-T2-T3-A4-A1-A2-A3-T4: (0.2)
T1-A3-A4-T2-A1-T3-T4-A2: (0.15)
T1-T2-T3-T4-A1-A2-A3-A4: (0.1)
T1-A2-A3-A4-A1-T2-T3-T4: (0.05)

Self-Driving Vehicles (SDV)

Self-Driving Vehicles

	Steps T1 - T4	**Blindspots A1 - A4**
Step 1	T1 = Object Detection	A1 = Data Validation
Goals Risks	T1+ = Data Gathering T1- = Confusion	A1+ = Simplify A1- = Oversimplify
Syn-thesis	S+: Meaningful detection filtered through pattern validation, e.g. Waymo's multi-sensor fusion system preventing false positives S-: Redundant Monitoring - sluggish decision-making due to over-checking, e.g. early Tesla systems prone to "phantom braking" due to overreaction	
Step 2	T2 = Data Analysis, Object Eecognition	A2 = Data Clearance, Update Priorities
Goals Risks	T2+ = Clear & Effective T2- = Paralysis	A2+ = Clean Start A2- = Complicate
Syn-thesis	S+: Real-Time Prioritization - Instantly clearing data noise to enable fast planning, e.g. Mobileye's RSS model S-: Analytical Bloat - processing everything equally, causing lag, e.g. Low-end AV prototypes that choke on edge-case scenarios due to data overload	
Step 3	T3 = Decision Making	A3 = Risk Assessment
Goals Risks	T3+ = Confident T3- = Reckless	A3+ = Prudence, Safeguard A3- = Alarmism
Syn-thesis	S+: Dynamic Caution - Balancing confidence with safety margins in real time Cruise adjusting routes dynamically in San Francisco congestion S-: False Safety Loop - Stops or stalls due to exaggerated risk aversion, e.g. Uber AV fatal crash (2018) — system failed to react after excessive hesitation	
Step 4	T4 = Action, Execution	A4 = Control/Stability Check
Goals Risks	T4+ = Change T4- = No Control	A4+ = Smooth A4- = No Change
Syn-thesis	S+: Seamless Maneuvering with continuous micro- adjustments, e.g. Waymo's predictive braking and turning S-: Status Quo Lock-in - Hesitating to act due to rigid safety buffer, e.g. AVs stuck at 4-way stops — all waiting forever due to over-conservatism	



Starting cycle: Data Gathering (T1) – Data Analysis (T2) – Decision-Making (T3) – Execution (T4). Fig. 8 presents the results.

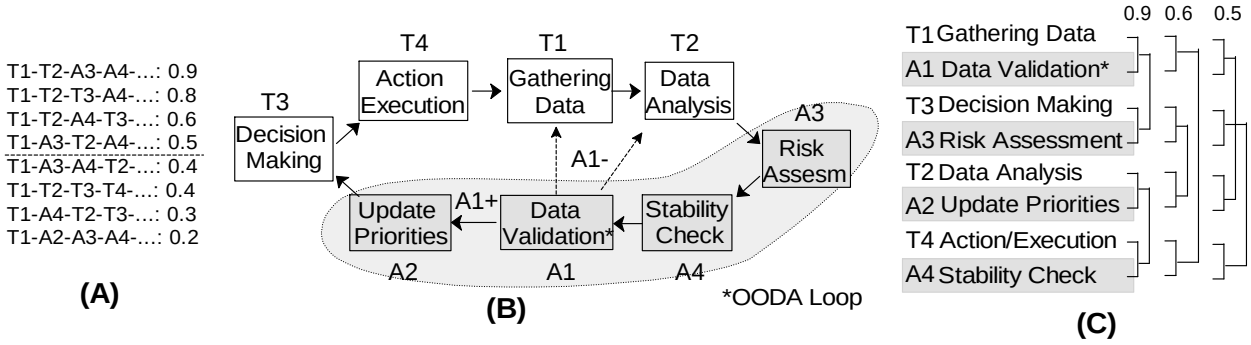
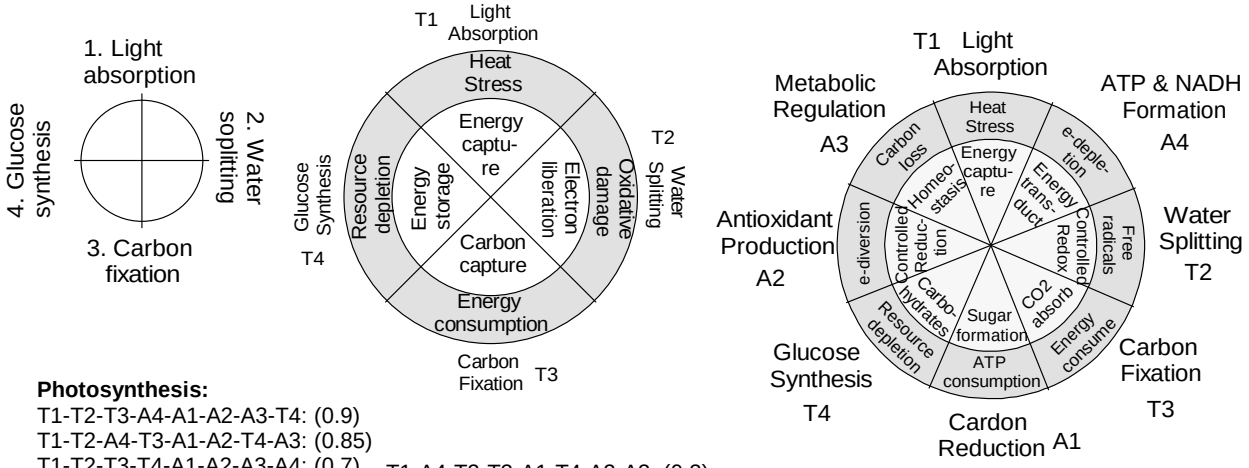


Fig. 8

Scheme A shows that 4 of 8 sequences have feasibility scores ≥ 0.5, indicating a fairly high self-regulation potential. Scheme B highlights that the Decision-Making stage (T3) is preceded by a large blind spot (A1–A4), which must be accounted for within the Data Analysis stage (T2). Notably, this blind spot includes processes reminiscent of the OODA loop (Observe–Orient–Decide–Act), suggesting that pre-decision quality control is essential. Specifically, once $A1^{+}$ = Proper Simplification is achieved, priorities should be re-evaluated and system memory reset (A2 = RAM Clearance).

Scheme C illustrates two key entanglements: T1–A1 (Data Gathering/Validation) is entangled with T3–A3 (Decision/Filtering) — indicating that data integrity strongly influences decision relevance; T2–A2 (Analysis/Memory) is entangled with T4–A4 (Execution/Stability) — implying that data processing governs execution quality and system robustness.

Photosynthesis



Photosynthesis:

T1-T2-T3-A4-A1-A2-A3-T4: (0.9)
T1-T2-A4-T3-A1-A2-T4-A3: (0.85)
T1-T2-T3-T4-A1-A2-A3-A4: (0.7)
T1-T2-A3-A4-A1-A2-T3-T4: (0.5)
T1-A3-T2-A4-A1-T3-A2-T4: (0.35)
T1-A4-T2-T3-A1-T4-A2-A3: (0.3)
T1-A3-A4-T2-A1-T3-T4-A2: (0.25)
T1-A2-A3-A4-A1-T2-T3-T4: (0.15)

DISC Traits

T1 = Influence

T1+ = Inspirational leadership, motivation

T1- = Manipulation, excessive emotionality

A1 = Objectivity

A1+ = Rational decision-making, impartiality

A1- = Cold detachment, inability to connect

Diagonal oppositions:

T1+ (Inspirational leadership) ↔ A1- (Cold detachment): Yes, these oppose each other

T1- (Manipulation) ↔ A1+ (Rational decision-making): Yes, these oppose each other

T2 = Dominance

T2+ = Decisive action, protection

T2- = Aggression, authoritarianism

A2 = Collaboration

A2+ = Mutual empowerment, shared solutions

A2- = Indecision, excessive compromise

Diagonal oppositions:

T2+ (Decisive action) ↔ A2- (Indecision): Yes, these oppose each other

T2- (Aggression) ↔ A2+ (Mutual empowerment): Yes, these oppose each other

T3 = Conscientiousness

T3+ = Reliability, thorough preparation

T3- = Rigidity, perfectionism

A4 = Flexibility

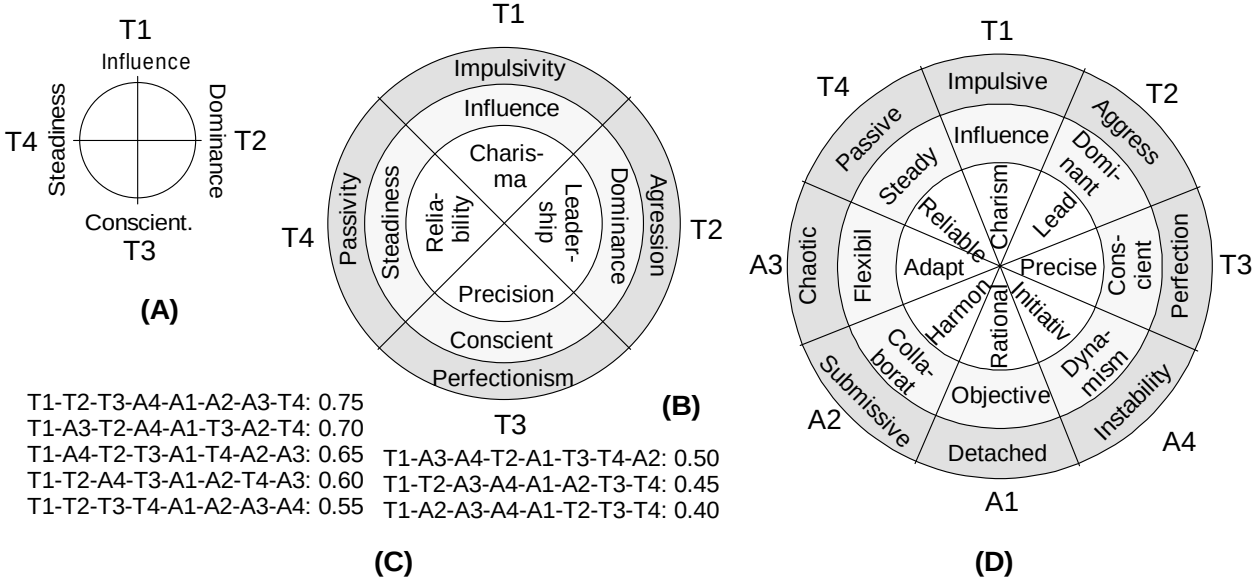
A4+ = Adaptability, openness to change

A4- = Inconsistency, lack of follow-through

Diagonal oppositions:

T3+ (Reliability) ↔ A4- (Inconsistency): Yes, these oppose each other

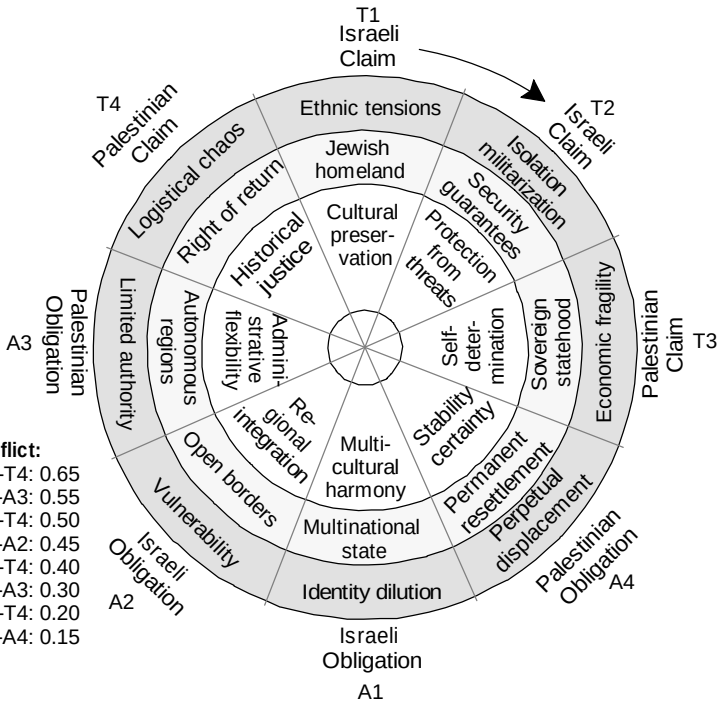
T3- (Rigidity) ↔ A4+ (Adaptability): Yes, these oppose each other



Isreali-Palestinean Conlict

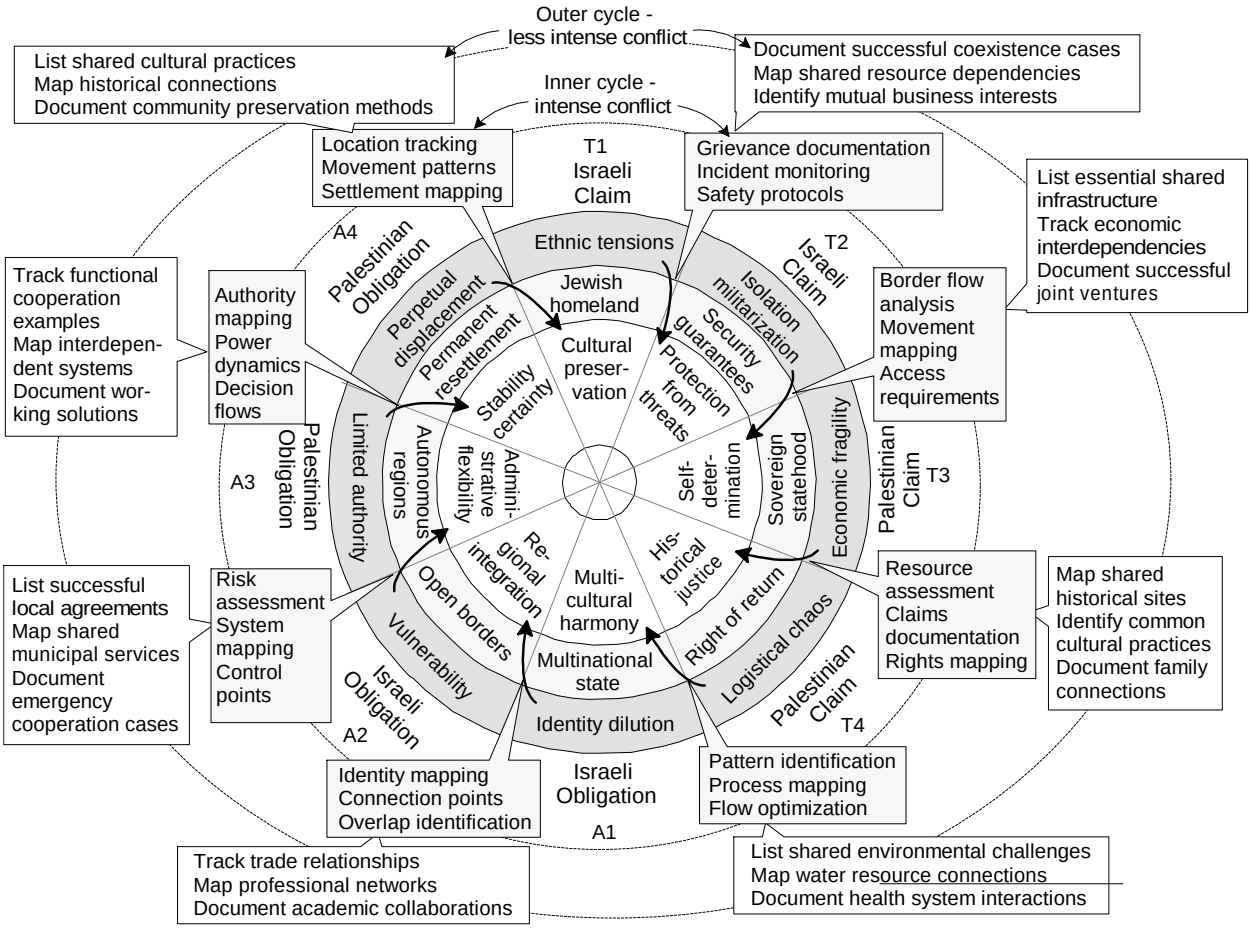
	Steps (T1, T2)	Blindspots (A1, A2)
Step	T11 = Israel must exist as the national home for the Jewish people	A11 = Multinational state for pluralistic coexistence
Goals Risks	T11+ = Cultural preservat. T11- = Ethnic exclusivity	A11+ = Multicultural harmony A11- = Identity dilution
Syn-thesis	S11+ = Cultural Federation (e.g., Belgium's federal system for both Flemish and Walloon identities) S11- = Enforced Homogeneity (e.g., Franco's Spain suppressing Catalan and Basque identities)	
Step	T12 = Israel requires robust security measures to protect its population	A12 = Open borders with reasonable protocols
Goals Risks	T12+ = Civilian protection T12- = Excess. restrictions	A12+ = Free movement A12- = Security vulnerability
Syn-thesis	S12+ = Collaborative Security (e.g., EU's Schengen Area) S12- = Militarized Control (e.g., Soviet-era Berlin Wall)	
Step	T21 = Palestinians must have their own independent sovereign state	A21 = Autonomous regions with regional integration
Goals Risks	T21+ = Self-determination T21- = Isolated sovereignty	A21+ = Cooperative governance A21- = Limited authority
Syn-thesis	S21+ = Confederal Partnership (e.g., Switzerland's cantons) S21- = Fragmented Dependence (e.g., Bantustans in apartheid South Africa)	
Step	T22 = Palestinian refugees should be allowed to return to their ancestral homes	A22 = Permanent resettlement of Palestinian refugees with compensation
Goals Risks	T22+ = Historical justice T22- = Demograph disrupt	A22+ = Future stability A22- = Historical erasure
Syn-thesis	S22+ = Heritage Reconciliation (e.g., Post-WWII German reconciliation with Jewish communities) S22- = Imposed Resettlement (e.g., Forced population exchanges between Greece and Turkey in the 1920s)	

Best sequence:



Israeli-Palestinian Conflict:
T1-T2-T3-A4-A1-A2-A3-T4: 0.65
T1-T2-A4-T3-A1-A2-T4-A3: 0.55
T1-A3-T2-A4-A1-T3-A2-T4: 0.50
T1-A3-A4-T2-A1-T3-T4-A2: 0.45
T1-T2-A3-A4-A1-A2-T3-T4: 0.40
T1-A4-T2-T3-A1-T4-A2-A3: 0.30
T1-A2-A3-A4-A1-T2-T3-T4: 0.20
T1-T2-T3-T4-A1-A2-A3-A4: 0.15

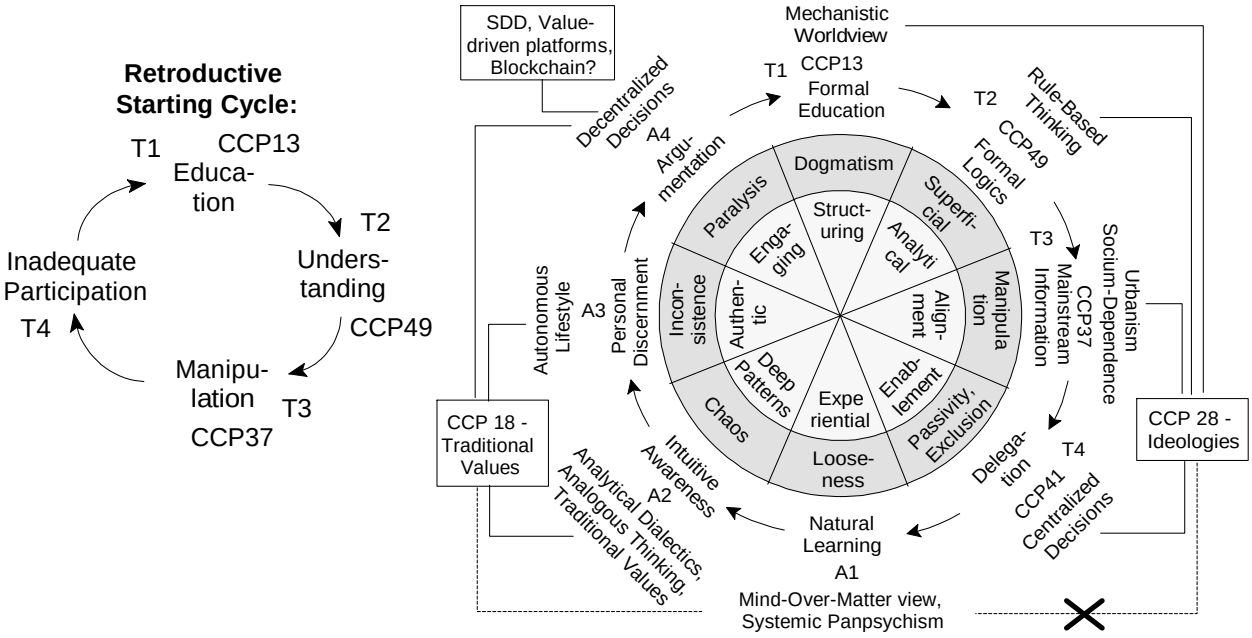
The following scheme suggests actionable steps for converting the negative aspects of each concept to the positive aspects of the following concept in the wheel.

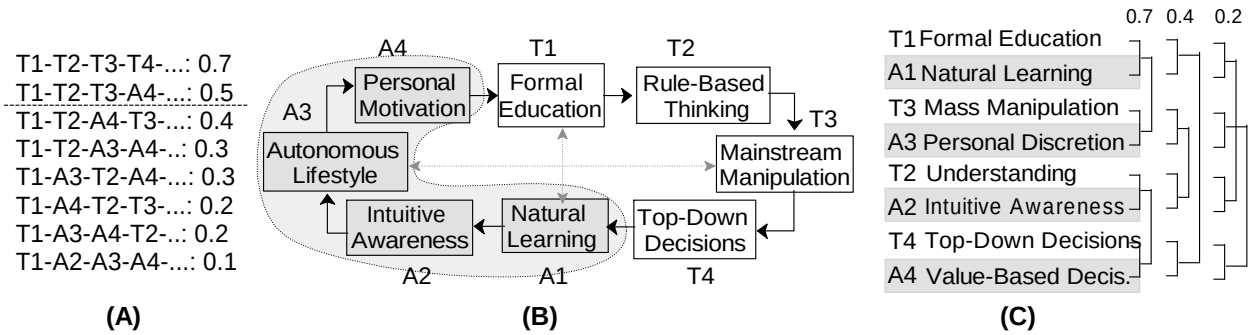


Note that this wheel is different from the previous, since it was obtained before conducting sequence optimization. It serves only as illustration of the method's application, but doesn't reflect the optimum steps due to suboptimum sequence.

Climate Crisis Problematique

	Steps (T1, T2)	Blindspots (A1, A2)	Steps (T3, T4)	Blindspots (A3, A4)
	CCP13		CCP37	
Step	T1 = Formal education	A1 = Natural learning	T3 = Mainstream Information	A3 = Personal Discrenment
Goals	T1+ = Structured	A1+ = Experiential	T3+ = Alignment	A3+ = Authentic
Risks	T1- = Dogmatic	A1- = Loose	T3- = Manipulation	A3- = Inconsistent
Owner	Mechanistic view	Experiential view	Urbanism, Sociophile	Autonomous lifestyle
Quality	S+ = Mind-over-matter mentality, stewardship		S+ = Conscious Creators, Enlightened Sovereigns	
Quantity	S- = Mechanistic views, consumerism		S- = Exploitative Actors, Merchants and Consumers	
	CCP49		CCP41	
Step	T2 = Formal Logic	A2 = Intuitive systems awareness	T4 = Inadeq. partici-pation, delegation	A4 = Inclusive participation
Goals	T2+ = Analytical	A2+ = Deep Patterns	T4+ = Enablement	A4+ = Engaging
Risks	T2- = Superficial	A2- = Chaotic	T4- = Exclusion	A4- = Paralysis
Owner	Rule-Based Thinking, Determinism	Tradictional Values, Holism, Indeterminism	Centralized Decisions	Decentralized Decision
Quality	S+ = Integrative wisdom, panpsychism		S+ = Dynamic Governance, SDD, Omnicracy	
Quantity	S- = Methodological Orthodoxy, Narrow Specialization		S- = Corporate hierarchy, Deep State	





Discussion

Comparison and Complementarity between Dialectical Wheels and TRIZ

Aspect	**Dialectic Wheels**	**TRIZ**	**Complementarity**
Contradiction Framing	Identifies semantically, as diagonal oppositions	Uses contradiction tables	TRIZ provides a starting grid; Dialectics extends and customizes in semantic, ethical, and cognitive domains
	Long-range conflict	Immediate conflict	TRIZ resolves local conflicts, dialectics optimizes strategy
Ideal Final Result (IFR)	AI-assisted S+	Achieving function with no additional resources	TRIZ provides stringent design constraints; dialectics expands IFR toward value co-creation, uniqueness, and ethical meaning
Causality Structure	Circular, spiralling via blind-spots	Linear, goal-driven	TRIZ can help inject new function blocks; Dialectics helps uncover missing transitions / synthesis paths
System Evolution	Maximizing self-regulatory dimensionality	Maximizing ideality *via* segmentation, dynamization	TRIZ adds technical discipline and cross-domain solution patterns; Dialectics enriches model of emergence
Undesired Outcomes	Automatically mapped as T-/A-	Explicit testing	TRIZ – structured testing, Dialectics – semantic foresight and early warnings

Both approaches begin with the recognition of contradictions—inherent tensions that block optimization. However, TRIZ typically considers local contradictions within a single object or system at a fixed point in time, while dialectical wheel focuses on contradictions that may be separated across time, agents, or domains. |As systems accelerate, these once-separated opposites increasingly interact or collide, making their integration not only possible but necessary. Thus, dialectical synthesis becomes a tool for managing tensions that TRIZ cannot formally capture — especially in living, adaptive, or distributed systems.

TRIZ guides problem-solution innovation, while dialectical method emphasizes system-wide rebalancing. It traces how tensions escalate or resolve, which makes it especially useful for dynamic, nonlinear, and human-centric systems. The framework may therefore serve as a diagnostic and contextual layer before TRIZ tools are applied—clarifying the nature of contradictions, and highlighting zones where innovation is meaningful rather than superficial.