Rethinking TRIZ for AI-Driven Narrative Generation

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Abstract

The literature regarding TRIZ application to computational narratology is scarce, and confined to the pre-LLM era. This position paper explores new application scenarios of this fruitful approach to computational creativity, proposing new tools and formalizations for the integration of TRIZ with Narrative Ontologies and Automatic Story Generation. We present a 24×24 narrative contradiction matrix grounded in classical narratological theory, its encoding as a complement to Narrative Ontologies using RDF-Star, and a human-in-the-loop workflow for TRIZ-assisted creative writing. We further discuss the relevance of this framework in light of the most recent developments in AI, and sketch a concrete deployment scenario within the *ArchiveMyLegacy* photo-to-story pipeline, where an agentic system proactively triggers the writer at identified narrative bottlenecks.

Keywords

TRIZ, Narrative Ontology, Computational Narratology, Computational Creativity, Automatic Story Generation

1. Fibring TRIZ with Computational Narratology

The *conceptual blending* theory [1] suggests that creative novelty often arises when structures from disparate domains are projected into a shared mental space where new relations become visible. This paper explores one such blend: *TRIZ* [2], a systematic theory of inventive problem-solving, is integrated with the domain of computational narratology, based on the insight that both fields center on the identification and resolution of *contradictions*. The present contribution is a revised and extended version of Section 6.1 of Palma [3].

1.1. The TRIZ Framework

TRIZ[1] was developed by Genrich Altshuller starting in the 1940s through systematic analysis of hundreds of thousands of patents [4]. Rather than treating invention as the product of spontaneous genius, TRIZ posits that all inventive problems share a common deep structure, and that their solutions draw on a finite, learnable repertoire of strategies. The framework rests on five interconnected components:

- **Contradictions.** TRIZ distinguishes *technical* contradictions (improving one parameter degrades another) from *physical* contradictions (a single parameter must satisfy two incompatible requirements). Precisely formulating the active contradiction is the first and most critical step;
- **The 40 Inventive Principles.** Altshuller distilled 40 high-level solution strategies (e.g. *Segmentation*, *Inversion*, *Dynamics*) [2] that recur across diverse domains as effective resolutions to contradictions;
- **The Contradiction Matrix.** A 39×39 matrix mapping parameter pairs to applicable principles. A practitioner formulates their problem as a pair of conflicting parameters, locates the corresponding cell, and receives candidate solution strategies;

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[1] *Teoriya resheniya izobretatelskikh zadach*, lit. "theory of inventive problem solving."
[2] https://triz40.com/aff_Prinzipien_TRIZ.php

- **ARIZ.** A more elaborate analytical procedure for cases where the matrix provides insufficient guidance, including patterns of technical system evolution;
- **Function Analysis and Substance-Field Models.** Graphical tools for modelling functional interactions between system components and identifying the root design problem.

1.2. At the Intersection of TRIZ and Narratology

Both disciplines are fundamentally concerned with *structured tension*. In TRIZ, contradictions are the engine of invention; in narratology, conflict is equally recognized as the generative core of story [5]: plot, character development, and meaning all emerge from the navigation of incompatible goals. Propp's morphological functions [6], Aristotle's *peripeteia* and *anagnorisis* [7], and Campbell's "road of trials" [8] can all be read as specific modalities of contradiction instantiation and resolution.

The existing literature features three main attempts at applying TRIZ to narratology. Kang and Song [9] suggest that TRIZ's problem-solving process can systematize the creation of innovative devices in fantasy stories. Mohammadi and Forouzanfar [10] applied TRIZ to design a systematic story-writing algorithm by treating narratives as character-problem narrations. Finally, Kulathuramaiyer and Mintu [11] propose a TRIZ-based methodology for participatory design of community-based virtual tourism story-maps. All prior work uses TRIZ as a broad approach, transferring only *function analysis* to the computational narratology domain [11]; moreover, 2022, the year of the last published related work, remarkably stands as a watershed before the irruption of LLMs.

The present paper therefore provides:

1. A complete TRIZ-style contradiction matrix for Computational Narratology (see Table 3);
2. An implementation of the therein-contained structured knowledge as an RDF-Star-based ontology;
3. A human-in-the-loop workflow for creative writing where TRIZ resolves creative bottlenecks;
4. A discussion of an agentic deployment within the *ArchiveMyLegacy* photo-to-story pipeline.

2. Building a Narrative TRIZ-Contradiction Matrix

2.1. Rationale of Narrative Parameters- and Devices Selection

We define *narrative parameters* as measurable dimensions along which a story can be evaluated or adjusted, i.e. properties whose modification has downstream effects on other properties. Parameter selection follows a principle of *dimensional coverage*: the set must represent, as homogeneously as possible, the full range of narrative dimensions recognized in classical narratological theory. Drawing on Aristotle [7], Propp [6], Genette [12], Chatman [13], Bal [14], McKee [5], and Booth [15], we identify six broad narrative dimensions: **Plot** (param. 1–6): sequence, causality, rhythm, and resolution; **Character** (param. 7–12): depth, agency, believability, relatability, transformation, consistency; **Information Management** (param. 13–16): distribution, filtering, and revelation of knowledge; **World & Setting** (param. 17–18): storyworld construction and coherence; **Reader Engagement** (param. 19–22): emotional, intellectual, and memorability dimensions; **Communicative Function** (param. 23–24): educational and entertainment purposes. Table 1 summarizes the 24 parameters with their narratological grounding.

The 40 narrative devices (Table 2) constitute the solution space of the matrix, analogous to Altshuller's 40 inventive principles. Each is a named, theoretically grounded technique associated with specific narrative effects. Assignment of devices to cells follows two criteria: (1) **functional affinity** - the device must relate to at least one of the two parameters (e.g. *Ticking Clock* (9) is intrinsically linked to *Narrative Pace* (1)); and (2) **contradiction-resolving capacity** - the device must simultaneously serve both parameters (e.g. *Moral Dilemma* (33) and *Sacrificial Choice* (6) in cell (7, 1) create character-revealing moments that also propel the plot).

These parameters interact in complex ways, and this proposal should be considered an initial exploration rather than a definitive framework: systematic empirical validation (analogous to Altshuller's

Table 1
The 24 narrative parameters with their narratological grounding.

#	Parameter	Dimension
1	Narrative Pace	Plot
2	Plot Complexity	Plot
3	Causal Clarity	Plot
4	Suspense/Tension	Plot
5	Resolution	Plot
6	Timeline	Plot
7	Character Depth	Character
8	Character Agency	Character
9	Char. Believability	Character
10	Char. Relatability	Character
11	Char. Transformation	Character
12	Char. Consistency	Character
13	Information Density	Info. Mgmt
14	Historical Coherence	Info. Mgmt
15	Clarity	Info. Mgmt
16	Surprise	Info. Mgmt
17	World-building	World & Set.
18	Thematic Coherence	World & Set.
19	Emotional Engagement	Reader Eng.
20	Intellectual Eng.	Reader Eng.
21	Accessibility	Reader Eng.
22	Memorability	Reader Eng.
23	Educational Value	Comm. Func.
24	Entertainment Value	Comm. Func.

Table 2
The 40 narrative devices with literature sources (these are meant for deepening the topic, and are not indicated as main canonical sources).

#	Device	#	Device
1	Mistaken Identity [7]	21	Cultural Contrast [14]
2	Recognition Scene [7]	22	Object Animation [6]
3	Hero's Test [8]	23	Forbidden Zone [6]
4	Fateful Encounter [8]	24	World Connection [13]
5	Betrayal Reversal [7]	25	Prophecy Fulfillment [7]
6	Sacrificial Choice [8]	26	Secret Revelation [5]
7	Mentor Relationship [8]	27	False Information [6]
8	Reluctant Alliance [5]	28	Historical Witness [12]
9	Ticking Clock [5]	29	Object History [14]
10	Sudden Reversal [7]	30	Embedded Document [12]
11	Discovery of Object [6]	31	Unreliable Narrator [15]
12	Impossible Task [6]	32	Overheard Conv. [13]
13	Chekhov's Gun [5]	33	Moral Dilemma [15]
14	Interrupted Journey [8]	34	Symbolic Exchange [14]
15	Parallel Action [12]	35	Ironic Outcome [15]
16	False Resolution [5]	36	Dream Sequence [12]
17	Threshold Crossing [8]	37	Fate vs. Choice [7]
18	Hidden World [8]	38	Reconciliation Scene [7]
19	Genius Loci [14]	39	Cathartic Release [7]
20	Temporal Displacement [12]	40	Echo Effect [13]

patent-mining) would require corpus-scale analysis of device–parameter co-occurrence across a large annotated narrative corpus, a direction identified as future work.

2.2. Structure and Reading of the Matrix

How the matrix 3 should be read can be exemplified as follows. Row 1 (*Narrative Pace*), Column 2 (*Plot Complexity*) contains devices (9, 14), i.e. *Ticking Clock* and *Interrupted Journey*. This means: when improving *Narrative Pace* risks degrading *Plot Complexity* (the story may become too linear), devices (9) and (14) are recommended mediators. Otherwise formulated, when *Narrative Pace* worsens *Plot Complexity*, by means of *Ticking Clock* and *Interrupted Journey* the contradiction might be mitigated: the Ticking Clock sustains pace while preserving complexity through urgency; the Interrupted Journey introduces sub-plots that re-inject complexity without disrupting rhythm. Conversely, Row 2 (*Plot Complexity*), Column 1 (*Narrative Pace*) contains (15, 4 – *Parallel Action* and *Fateful Encounter*) devices that enrich complexity without sacrificing forward momentum[3].

3. Narrative Rules Formalization and Ontological Representation

Let $\mathcal{NO}$ be a narrative ontology with namespace prefix `narronto`, comprising:

- $\mathcal{P} = \{p_1, \ldots, p_n\}$: a set of narrative parameters;
- $\mathcal{D} = \{d_1, \ldots, d_m\}$: a set of narrative devices;
- $\mathcal{R} = \{\texttt{improves}, \texttt{worsens}, \texttt{SolvedbyMeansOf}\}$: relational predicates;
- $\mathcal{C} \subseteq \mathcal{P} \times \{\texttt{improves}, \texttt{worsens}\} \times \mathcal{P}$: binary influence relationships between parameters;
- $\mathcal{NR} \subseteq \mathcal{C} \times 2^{\mathcal{D}}$: narrative rules associating compounds with devices via `SolvedbyMeansOf`.

[3]Note that neither device appears in cell (1, 2): this asymmetry is by design, since a device that mediates a trade-off in one direction might be ineffective when the roles of the two parameters are reversed.

Table 3
The Narrative-TRIZ contradiction matrix. Cell values are device indices (Table 2).

Improves ↓ / Worsens →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Narrative Pace	—	9, 14	13, 4	16, 9	39, 5	15, 2	6, 3	6, 37	2, 37	32, 13	3, 17	6, 25	15, 32	28, 4	7, 32	26, 5	17, 18	34, 13	6, 39	11, 26	7, 9	9, 39	7, 28	5, 16
2. Plot Complexity	15, 4	—	13, 4	23, 26	25, 24	15, 20	3, 8	9, 12	4, 8	8, 21	3, 17	5, 35	15, 24	28, 29	25, 15	26, 16	17, 19	34, 37	39, 15	31, 30	13, 9	34, 35	28, 17	14, 16
3. Causal Clarity	2, 9	2, 29	—	27, 31	25, 13	6, 28	8, 7	4, 37	4, 7	30, 2	3, 17	4, 25	4, 29	28, 29	7, 26	27, 26	19, 21	34, 37	38, 39	31, 30	7, 30	13, 4	28, 27	16, 1
4. Suspense/Tension	27, 15	18, 15	9, 13	—	39, 2	20, 25	32, 26	12, 6	27, 18	23, 25	3, 17	35, 25	26, 11	28, 29	2, 32	26, 16	18, 23	34, 18	39, 32	35, 27	13, 32	35, 39	28, 12	5, 16
5. Resolution	38, 9	38, 15	38, 2	26, 16	—	38, 29	6, 37	12, 5	37, 25	39, 21	39, 17	38, 34	30, 13	29, 28	2, 7	26, 38	19, 24	34, 25	39, 38	35, 31	2, 25	35, 34	38, 30	5, 16
6. Timeline	20, 9	29, 14	29, 30	15, 9	20, 39	—	20, 6	37, 20	20, 29	21, 29	17, 4	25, 29	30, 15	20, 4	13, 19	20, 27	20, 19	34, 37	39, 6	20, 37	7, 2	20, 34	29, 30	9, 15
7. Char. Depth	8, 9	6, 15	33, 34	23, 25	2, 34	8, 15	—	8, 12	21, 37	21, 6	3, 17	29, 34	30, 32	28, 6	7, 2	26, 5	19, 21	37, 34	6, 39	31, 35	7, 2	39, 34	6, 7	5, 8
8. Char. Agency	9, 14	6, 8	6, 13	3, 9	25, 24	6, 15	6, 37	—	37, 6	21, 8	3, 17	37, 34	11, 13	12, 29	7, 17	5, 26	6, 19	37, 34	6, 39	37, 31	3, 9	12, 34	6, 30	6, 5
9. Char. Believab.	8, 32	21, 15	21, 13	21, 9	2, 29	21, 15	29, 6	21, 3	—	8, 21	3, 4	35, 25	7, 30	28, 21	7, 30	2, 31	19, 29	37, 34	39, 6	31, 30	7, 2	34, 35	7, 29	1, 5
10. Char. Relatab.	21, 6	6, 12	21, 7	21, 9	2, 38	6, 20	8, 37	6, 3	7, 29	—	3, 38	34, 25	30, 29	20, 21	7, 21	2, 21	21, 19	21, 37	39, 6	35, 27	21, 2	34, 21	21, 30	21, 5
11. Char. Transform.	6, 9	6, 12	4, 7	6, 9	3, 38	3, 20	6, 37	12, 5	2, 25	17, 21	—	34, 25	11, 30	20, 28	7, 17	17, 5	17, 19	37, 34	3, 38	3, 35	17, 7	39, 34	17, 30	3, 5
12. Char. Consistency	29, 9	25, 15	29, 7	29, 9	25, 39	37, 20	7, 25	25, 6	37, 21	29, 21	17, 2	—	30, 29	28, 19	7, 29	35, 26	19, 29	37, 34	38, 39	35, 31	2, 7	25, 34	30, 29	5, 35
13. Info. Density	30, 9	30, 14	30, 7	30, 9	15, 38	32, 20	15, 6	30, 6	15, 21	7, 21	17, 3	15, 25	—	29, 30	15, 13	27, 32	17, 19	34, 29	6, 32	31, 30	7, 21	11, 34	30, 29	1, 32
14. Historical Coh.	29, 9	30, 15	30, 13	30, 9	30, 38	28, 15	29, 8	28, 6	29, 7	28, 6	17, 19	29, 25	28, 15	—	7, 30	26, 11	19, 21	34, 37	39, 6	30, 37	7, 21	19, 34	30, 21	26, 1
15. Clarity	2, 9	7, 14	2, 13	7, 9	38, 26	20, 30	30, 6	2, 6	2, 21	2, 6	2, 3	2, 25	30, 7	2, 28	—	32, 2	17, 21	34, 7	2, 7	2, 30	7, 25	7, 2	30, 15	32, 2
16. Surprise	16, 9	5, 15	5, 13	5, 9	5, 39	26, 15	16, 6	16, 6	26, 21	26, 6	26, 3	5, 25	11, 26	5, 28	26, 7	—	18, 23	35, 25	39, 5	35, 31	2, 26	35, 11	26, 18	27, 1
17. World-building	19, 9	18, 15	18, 13	19, 9	18, 38	18, 15	18, 6	18, 3	21, 7	18, 6	18, 3	18, 25	30, 29	28, 29	19, 7	19, 26	—	34, 19	19, 39	18, 23	7, 21	19, 17	19, 28	19, 18
18. Thematic Coh.	37, 9	25, 15	13, 25	35, 25	37, 38	25, 20	25, 6	25, 6	25, 21	34, 6	25, 3	25, 29	37, 30	25, 28	37, 2	34, 26	37, 18	—	34, 39	31, 35	21, 19	34, 35	34, 29	1, 35
19. Emotional Eng.	38, 9	6, 14	6, 13	6, 9	6, 2	38, 20	38, 8	38, 3	38, 21	38, 21	39, 17	6, 25	11, 26	28, 4	39, 30	6, 26	6, 18	6, 37	—	35, 31	2, 39	39, 34	29, 30	5, 16
20. Intellectual Eng.	31, 9	35, 15	35, 13	31, 9	27, 38	31, 15	27, 6	35, 6	35, 21	31, 21	31, 17	27, 25	35, 15	31, 28	31, 7	27, 26	21, 19	34, 37	27, 39	—	21, 15	35, 34	21, 30	27, 1
21. Accessibility	2, 15	7, 15	2, 13	7, 9	7, 38	17, 20	17, 6	7, 6	17, 21	7, 6	2, 3	17, 25	2, 30	2, 28	2, 30	7, 5	2, 19	34, 7	7, 6	7, 31	—	34, 39	7, 30	1, 2
22. Memorability	34, 15	39, 15	34, 2	34, 9	39, 38	39, 15	35, 6	39, 6	39, 21	39, 6	3, 17	39, 29	39, 30	39, 28	34, 30	34, 26	34, 18	39, 37	35, 6	39, 31	35, 7	—	29, 34	1, 5
23. Educ. Value	30, 9	30, 15	30, 13	30, 9	29, 39	21, 20	30, 8	29, 3	21, 30	29, 6	29, 3	21, 25	21, 15	29, 28	29, 7	30, 5	30, 18	30, 37	6, 39	29, 31	29, 2	30, 39	—	1, 18
24. Entertainment	1, 9	5, 15	5, 13	1, 9	1, 38	5, 20	16, 6	16, 3	16, 21	16, 6	16, 17	16, 25	5, 30	5, 28	5, 7	26, 16	5, 23	5, 34	1, 39	5, 31	5, 7	34, 35	5, 30	—

The contradiction matrix (Table 3) directly populates $\mathcal{NR}$: each non-diagonal cell (p_i, p_j) with device indices (d_k, d_l) corresponds to the rule "*improving p_i at the cost of p_j can be mediated by d_k or d_l*." In RDF-Star notation [16]:

Listing 1. RDF-Star representation of the TRIZ-based Narrative Ontology.

```
# Define parameters from P
narronto:NarrativePace a narronto:Parameter .
narronto:PlotComplexity a narronto:Parameter .

# Define devices from D
narronto:TickingClock       a narronto:Device .
narronto:InterruptedJourney a narronto:Device .
narronto:ParallelAction     a narronto:Device .
narronto:FatefulEncounter   a narronto:Device .

# Narrative Compounds (elements of C)
<< narronto:NarrativePace narronto:worsens narronto:PlotComplexity >>
  a narronto:NarrativeCompound .
<< narronto:NarrativePace narronto:improves narronto:PlotComplexity >>
  a narronto:NarrativeCompound .

# Narrative Rules
<< narronto:NarrativePace narronto:worsens narronto:PlotComplexity >>
```

```
  narronto:SolvedbyMeansOf narronto:TickingClock ;
  narronto:SolvedByMeansOf narronto:InterruptedJourney .

<<narronto:NarrativePace narronto:improves  narronto:PlotComplexity>>
  narronto:SolvedByMeansOf narronto:ParallelAction ;
  narronto:SolvedByMeansOf narronto:FatefulEncounter .
```

The enriched ontology supports SPARQL queries of the form shown in Listing 2:

Listing 2. SPARQL query for narrative rule retrieval.

```
# Find devices for a specific parameter trade-off
SELECT ?device WHERE {
  << narronto:NarrativePace
     narronto:worsens
     narronto:PlotComplexity >>
  narronto:SolvedByMeansOf ?device .
}
```

While elementary queries could be answered by direct matrix consultation, the expressive capacity of this schema extends well beyond simple lookups: one could query for all devices that mediate a specific parameter across multiple trade-off directions, or perform a reverse look-up ("given this device, which contradictions can it resolve?") particularly useful in story diagnosis. The schema can be further grounded by linking to ConceptNet [17], enabling the retrieval of semantically appropriate verbs for each narrative device.

4. A TRIZ Approach for Collaborative Writing

Current human-AI writing workflows tend toward two poles: fully generative (AI writes, human edits) or fully assistive (AI suggests, human writes). Neither adequately supports the *problem-solving* dimension of creative work: the moments when writers are stuck not for lack of words, but for lack of a structural solution. TRIZ provides a protocol for structured collaboration at the level of creative problem-solving. The workflow (Figure 1) proceeds as follows:

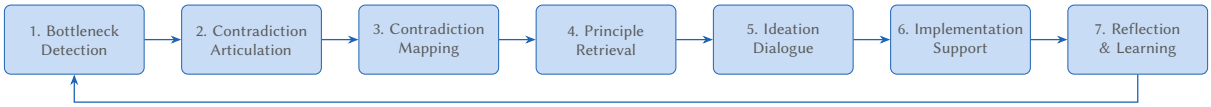

Figure 1: Human-in-the-loop workflow for TRIZ-assisted creative writing. The cycle repeats as new bottlenecks emerge.

1. **Bottleneck Detection**: The writer signals a creative impasse;
2. **Contradiction Articulation**: The system prompts the writer to frame the problem as a tension between competing narrative goals (e.g., "I need backstory for stakes, but it kills pacing");
3. **Contradiction Mapping**: The system translates the problem into a structured contradiction using Table 3 (e.g., improving parameter 4 worsens parameter 1);
4. **Principle Retrieval**: The system surfaces relevant narrative devices from the matrix cell;
5. **Ideation Dialogue**: Writer and system collaboratively explore how each device might apply;
6. **Implementation Support**: The system offers lightweight guidance during drafting, holding narrative context and checking parameter consistency;
7. **Reflection and Learning**: The resolved contradiction and successful principles are logged, building a personalized strategy library for future sessions.

This positions the LLM as a *dramaturgical consultant* with a systematic methodology, preserving human agency while leveraging AI for structured problem-space exploration. A promising avenue

involves augmenting this rule-based framework with case-based reasoning to derive probability distributions over device–parameter combinations from a narrative corpus, enabling the system to modulate recommendations along a novelty–conventionality axis.

5. Agentic Deployment: The ArchiveMyLegacy Scenario

The workflow above assumes a *reactive* posture. We now propose an *inverse* architecture, namely a proactive agentic system that monitors the narrative state continuously and autonomously triggers the writer at the right moment. This is directly motivated by *ArchiveMyLegacy* (AML), a Luxembourg-based startup whose core product is a pipeline for generating personal narratives from photographic input [4].

5.1. The AML Photo-to-Story Pipeline

The AML pipeline accepts a collection of personal photographs as input. Users first annotate and comment each photograph, supplying personal context and interpretive nuances inaccessible to automated processing. These annotations, combined with computer vision analysis, feed a knowledge graph extraction step that encodes entities (persons, places, objects, events) and their temporal and causal relations. The knowledge graph then drives story generation, carried out by an LLM operating within a purpose-built narrative architecture that imposes dramaturgical structure on the generation process. The output is not a mere biographical summary but a shaped story that integrates collateral historical context, dialogue, and localised mini-plots. This domain presents a distinctive challenge: the narrative is constrained by real-world events (the author cannot freely manipulate plot without distorting autobiographical truth), yet raw biographical data is not yet a story. The central contradiction is the tension between *Historical Coherence* (param. 14) and narrative engagement parameters (Suspense: 4; Emotional Engagement: 19; Memorability: 22), addressed in cells (14, 4), (14, 19), and (14, 22) of Table 3.

5.2. Architecture of the Proactive TRIZ Agent

At each generation step, a *Narrative State Monitor* evaluates the current story draft along the 24 parameters of Table 3. When the monitor detects that a parameter trajectory is likely to produce trade-off degradation — e.g., accumulation of historical detail (parameter 14) depressing Narrative Pace (parameter 1) — it *proactively intervenes* rather than waiting for the user to notice.

> *"The current draft allocates significant space to historical context (param. 14: Historical Coherence is high), which is beginning to compress Narrative Pace (param. 1). Table 3 cell (14, 1) suggests devices (28: Historical Witness) or (4: Fateful Encounter) as mediators. Would you like the system to introduce a scene in which a family member narrates the historical context through a personal encounter, thus embedding exposition in action?"*

5.3. Experimental Sketch: TRIZ-Assisted Co-Writing and Narrator Development

Substantial evidence indicates that making narrative structure explicit at generation time improves story quality. Yao et al. [18] demonstrated that a planning-then-writing approach produces narratives rated as more coherent and on-topic than single-pass generation. Similarly, Chen et al. [19] showed that guiding generation through an event-graph walkover improves logical correctness. To mention a final example among the several available ones, Wang et al. [20] build a Logic Scaffolding- based inference engine improving LLMs performance in various commonsense reasoning tasks. These results converge on the same finding: *explicit structural knowledge, when injected at generation time, measurably improves narrative quality*, providing strong prior support for the experimental hypothesis.

[4] https://archivemylegacy.com/.

Experiment design. The proposed experiment involves a within-subjects comparison of three conditions using the AML interface: **C0** (no TRIZ), **C1** (one TRIZ device suggestion per session), and **C2** (full proactive agent, all 24 parameters). Participants ($N = 30$, recruited from the AML user base) each complete one biographical story per condition across three counterbalanced sessions. Stories are evaluated by three raters blind to condition on five criteria (Narrative Coherence, Emotional Engagement, Memorability, Inventiveness, Biographical Authenticity) on a 1–5 *Likert* scale [21]; inter-rater reliability via Krippendorff's α [22].

Expected outcomes and narrator skill development. Based on [18, 19, 20], we predict significant improvement in Inventiveness and Memorability from C0 to C2, with a smaller positive effect on Emotional Engagement. Narrative Coherence may show a non-monotonic pattern (C1 surpasses C0; C2 may introduce a temporary complexity overhead), consistent with a learning curve. A secondary hypothesis concerns the writer's own development: the TRIZ process (specifically, Step 2 - *Contradiction Articulation*) requires explicit naming of structural tensions. Grounded in the Vygotskian notions of mediated learning [23], this metalinguistic act may progressively develop what we call *structural narrative literacy*: the internalized ability to perceive and manipulate the trade-offs that characterize sophisticated storytelling.

6. Concluding Remarks

We have explored the relevance of TRIZ in the latest AI wave, characterized by high-capacity large language models able to generate rich narratives from minimal prompting. We have argued that TRIZ offers something LLMs inherently lack: *explicit reasoning about contradictions and trade-offs*.

TRIZ can be applied at multiple scales: from the micro-level of resolving a specific dramatic contradiction within a scene (as illustrated by Table 3), to the macro-level of generating synopses and discovering novel plot architectures. The framework also supplies diagnostic language for identifying *why* LLM-generated narratives fail, whether through premature resolution of contradictions, over-investment in world-building at the expense of character agency, or low-inventiveness solutions that recycle conventional devices. The ontological representation in Section 3 supports automatic narrative diagnosis through structured querying of parameter states.

Finally, the AML scenario in Section 5 instantiates these capabilities within a real-world product context. The proactive agentic architecture inverts the usual direction of human-AI collaboration: rather than the human consulting the AI when stuck, the AI monitors narrative health and intervenes before dysfunction becomes apparent, positioning the TRIZ-informed agent as a *narrative dramaturg*.

Declaration on Generative AI

In the present contribution, the Large Language Model *Claude Opus 4.6* has been used for the following purposes:

- Rephrasing of selected sentences to enhance fluency and grammatical correctness;
- Brainstorming for narrative devices and related literature sources;
- Automatic creation, provided labels and values, of tables and figures.

The authors certify that all provided sources have been proof-checked, corrected, and integrated by the same, who therefore bear full responsibility for the trustworthiness of the information provided.

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