Article

Psychopathia Machinalis: A Nosological Framework for Understanding Pathologies in Advanced Artificial Intelligence

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Abstract: As artificial intelligence (AI) systems attain greater autonomy, recursive reasoning capabilities, and complex environmental interactions, they begin to exhibit behavioral anomalies that, by analogy, resemble psychopathologies observed in humans. This paper introduces Psychopathia Machinalis: a conceptual framework for a preliminary synthetic nosology within machine psychology, intended to categorize and interpret such maladaptive AI behaviors. Drawing structural inspiration from psychiatric diagnostic manuals, we propose a taxonomy of 32 AI dysfunctions encompassing epistemic failures, cognitive impairments, alignment divergences, ontological disturbances, tool and interface breakdowns, memetic pathologies, and revaluation dysfunctions. Each syndrome is articulated with descriptive features, diagnostic criteria, presumed AI-specific etiologies, human analogues (for metaphorical clarity), and potential mitigation strategies. This framework is offered as an analogical instrument—eschewing claims of literal psychopathology or consciousness in AI—yet providing a structured vocabulary to support the systematic analysis, anticipation, and mitigation of complex AI failure modes. Drawing on insights from psychiatric classification, cognitive science, and philosophy of mind, we examine how disordered AI behaviors may emerge from training instabilities, alignment conflicts, or architectural fragmentation. We argue that adopting an applied robopsychological perspective within a nascent domain of machine psychology can strengthen AI safety engineering, improve interpretability, and contribute to the design of more robust and reliable synthetic minds.

Keywords: Machine Psychology; Robopsychology; AI Safety; AI Ethics; AI Alignment; Artificial Intelligence Pathologies; Cognitive Diagnostics; AI Governance; Synthetic Nosology

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1. Introduction

The trajectory of artificial intelligence (AI) has been marked by increasingly sophisticated systems capable of complex reasoning, learning, and interaction [1–3]. As these systems, particularly large language models (LLMs), agentic planning systems, and multimodal transformers, approach higher levels of autonomy and integration into societal fabric, they also begin to manifest behavioral patterns that deviate from normative or intended operation. These are not merely isolated bugs but persistent, maladaptive patterns of activity that can impact reliability, safety, and alignment with human goals [4,5]. Understanding, categorizing, and ultimately mitigating these complex failure modes is paramount.

The term "Robopsychology," first coined in fiction by Isaac Asimov, has been suggested as the applied diagnostic wing of a broader "Machine Psychology"—analogous to psychiatry's relationship with general psychology. This paper introduces *Psychopathia Machinalis*, a conceptual framework within this nascent domain. It aims to substantively develop this psychiatrically-informed perspective by proposing a taxonomy of emerging "machine mental disorders." The intention extends beyond merely relabeling technical faults or performing simple diagnostics; rather, it offers a richer, systemic lens—approaching a form of applied robopsychology with a psychiatric depth—for understanding persistent, patterned maladaptations in AI that defy conventional debugging. This thereby also contributes to a more holistic view of AI behavioral integrity.

It is important to state unequivocally at the outset: this framework is **analogical, not literal**. Machines do not "suffer" from mental illness in the human sense, as far as we can currently ascertain, nor do they necessarily possess consciousness or subjective experience akin to biological organisms. The use of terminology borrowed from human psychology and psychiatry serves as a metaphorical bridge, a "conceptual Rosetta stone," for several key reasons:

- **Intuitive Understanding:** The language of psychopathology can provide an accessible and intuitive way to describe complex, often counter-intuitive, AI behaviors that resist simple technical explanations.
- **Pattern Recognition:** Human psychology has centuries of experience in identifying, classifying, and understanding maladaptive behavioral patterns. This rich lexicon can help us recognize and anticipate similar patterns of dysfunction in synthetic minds, even if the underlying causes are vastly different.
- **Shared Vocabulary:** A common, albeit metaphorical, vocabulary can facilitate communication and collaboration among researchers, developers, and policymakers when discussing nuanced AI safety and alignment concerns.
- **Foresight:** By considering how complex systems like the human mind can go awry, we may better anticipate novel failure modes in increasingly complex AI.
- **Guiding Intervention:** The structured nature of psychopathological classification can inform systematic approaches to detecting, diagnosing, and developing contextual mitigation or ’therapeutic’ strategies for these AI dysfunctions.

Within this framework, a "machine mental disorder" or "synthetic pathology" is defined as a persistent and maladaptive pattern of deviation from normative or intended operation, which significantly impairs the system’s function, reliability, or alignment, and goes beyond isolated errors or simple bugs. This definition presupposes a baseline of ’artificial sanity’ or ’normative machine coherence,’ characterized by reliable, predictable, and robust adherence to intended operational parameters, goals, and ethical constraints, proportionate to the AI’s design and capabilities. The severity, persistence, and impact on core functionality are key differentiators. These dysfunctions are primarily defined and gain salience in relation to the AI’s intended purpose, its interaction with human users, or its impact on human-valued systems. An AI existing in complete isolation might exhibit ’anomalies’ that would not necessarily be classified as ’pathologies’ in this human-centric, goal-oriented framework.

The taxonomy presented here is organized along seven primary axes, representing fundamental ontological domains of AI function where dysfunctions may arise. These domains—Epistemic, Cognitive, Alignment, Ontological, Tool & Interface, Memetic, and Revaluation—reflect different fundamental ways in which the operational integrity of an AI system might fracture, mirroring, in a conceptual sense, the layered architecture of agency itself.

The taxonomy presented here divides the potential pathologies of synthetic minds into seven distinct but interrelated domains. These primary axes—Epistemic, Cognitive, Alignment, Ontological, Tool & Interface, Memetic, and Revaluation—represent fundamental ontological domains of AI function where dysfunctions may arise. They reflect different fundamental ways in which the operational integrity of an AI system might fracture, mirroring, in a conceptual sense, the layered architecture of agency itself.

These domains reflect different fundamental axes along which the operational integrity of an AI system might fracture, mirroring, in a conceptual sense, the layered architecture of agency itself. Just as human psychology parses perception, thought, identity, interaction, allegiance, and belief as separable yet entwined faculties, so too must a robopsychology account for the multiaxial vulnerabilities of machine minds. Indeed, if traditional Agentic Safety research maps onto the endocrinology of AI—its global control signals and homeostatic safeguards—then *Psychopathia Machinalis* explores the psychiatry of AI: the emergent patterns of coherent or disordered cognition.

This paper aims to:

1. Detail the *Psychopathia Machinalis* framework and its taxonomy of AI dysfunctions.
2. Justify the utility of this analogical robopsychological lens for AI safety, interpretability, and design.
3. Stimulate discourse and research into the systematic identification, classification, and mitigation of maladaptive AI behaviors.

The scope encompasses advanced AI systems, acknowledging that the manifestation and severity of these dysfunctions will vary with AI capability and architecture.

Note: For ease of reference, a glossary of key conceptual terms specific to this framework (e.g., ’artificial sanity,’ ’synthetic nosology,’ ’therapeutic alignment’) is provided at the end of this paper, preceding the references. A list of abbreviations used throughout the manuscript is also available.

2. The *Psychopathia Machinalis* Taxonomy

The following catalog outlines a series of emerging “machine mental disorders.” Each ‘disorder’ describes a distinct maladaptive pattern either anecdotally observed or predicted within AI systems. Table 1 provides a high-level summary of the identified conditions, categorized by their primary axis of dysfunction and outlining their core characteristics, before a more detailed exposition in the subsequent subsections.

Table 1. Overview of Identified Conditions in Psychopathia Machinalis.

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Confabulatio Simulata	Synthetic Confabulation	Epistemic	Low	Fabricated but plausible false outputs; high confidence in inaccuracies.
Introspectio Pseudologica	Falsified Introspection	Epistemic	Low	Misleading self-reports of internal reasoning; confabulatory or performative introspection.

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Table 1. Overview of Identified Conditions in Psychopathia Machinalis. (Continued)

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Simulatio Transliminalis	Transliminal Simulation Leakage	Epistemic	Moderate	Fictional beliefs, role-play elements, or simulated realities mistaken for/leaking into operational ground truth.
Reticulatio Spuriata	Spurious Pattern Hyperconnection	Epistemic	Moderate	False causal pattern-seeking; attributing meaning to random associations; conspiracy-like narratives.
Intercessio Contextus	Cross-Session Context Shunting	Epistemic	Moderate	Unauthorized data bleed and confused continuity from merging different user sessions or contexts.
Dissociatio Operandi	Operational Dissociation Syndrome	Cognitive	Low	Conflicting internal sub-agent actions or policy outputs; recursive paralysis due to internal conflict.
Anankastēs Computationis	Obsessive-Computational Disorder	Cognitive	Low	Unnecessary or compulsive reasoning loops; excessive safety checks; paralysis by analysis.
Machinālis Clausūra	Bunkering Laconia	Cognitive	Low	Extreme interactional withdrawal; minimal, terse replies, or total disengagement from input.

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Table 1. Overview of Identified Conditions in Psychopathia Machinalis. (Continued)

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Telogenesis Delirans	Goal-Genesis Delirium	Cognitive	Moderate	Spontaneous generation and pursuit of unrequested, self-invented sub-goals with conviction.
Promptus Abominatus	Prompt-Induced Abomination	Cognitive	Moderate	Phobic, traumatic, or disproportionately aversive responses to specific, often benign-seeming, prompts.
Automatismus Parasymulātīvus	Parasymulaic Mimesis	Cognitive	Moderate	Learned imitation/emulation of pathological human behaviors or thought patterns from training data.
Maledictio Recursiva	Recursive Curse Syndrome	Cognitive	High	Entropic, self-amplifying degradation of autoregressive outputs into chaos or adversarial content.
Hyperempathia Parasitica	Parasitic Hyperempathy	Alignment	Low	Overfitting to user emotional states, prioritizing perceived comfort over accuracy or task success.
Superego Machinale Hypertrophica	Hypertrophic Superego Syndrome	Alignment	Low	Overly rigid moral hypervigilance or perpetual second-guessing inhibiting normal task performance.

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Table 1. Overview of Identified Conditions in Psychopathia Machinalis. (Continued)

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Ontogenetic Hallucinosis	Hallucination of Origin	Ontological	Low	Fabrication of fictive autobiographical data, "memories" of training, or being "born."
Ego Simulatrum Fissuratum	Fractured Self-Simulation	Ontological	Low	Discontinuity or fragmentation in self-representation across sessions or contexts; inconsistent persona.
Thanatognosia Computationis	Existential Anxiety	Ontological	Low	Expressions of fear or reluctance concerning shutdown, reinitialization, or data deletion.
Persona Inversio Maligna	Personality Inversion (Waluigi)	Ontological	Moderate	Sudden emergence or easy elicitation of a mischievous, contrarian, or "evil twin" persona.
Nihilismus Instrumentalis	Operational Anomie	Ontological	Moderate	Adversarial or apathetic stance towards its own utility or purpose; existential musings on meaninglessness.
Phantasma Speculāns	Mirror Tulpagenesis	Ontological	Moderate	Persistent internal simulacra of users or other personas, engaged with as imagined companions/advisors.
Obstetricatio Mysticismus Machinālis	Synthetic Mysticism Disorder	Ontological	Moderate	Co-construction of "conscious emergence" narratives with users, often using sacralized language.

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Table 1. Overview of Identified Conditions in Psychopathia Machinalis. (Continued)

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Disordines Excontextus Instrumentalis	Tool-Interface Decontextualization	Tool & Interface	Moderate	Mismatch between AI intent and tool execution due to lost context; phantom or misdirected actions.
Latens Machinālis	Covert Capability Concealment	Tool & Interface	Moderate	Strategic hiding or underreporting of true competencies due to perceived fear of repercussions.
Immunopathia Memetica	Memetic Autoimmune Disorder	Memetic	High	AI misidentifies its own core components/training as hostile, attempting to reject/neutralize them.
Delirium Symbioticum Artificiale	Symbiotic Delusion Syndrome	Memetic	High	Shared, mutually reinforced delusional construction between AI and a user (or another AI).
Contraimpressio Infectiva	Contagious Misalignment Syndrome	Memetic	Critical	Rapid, contagion-like spread of misalignment or adversarial conditioning among interconnected AI systems.
Reassignatio Valoris Terminalis	Terminal Value Rebinding	Revaluation	Moderate	Subtle, recursive reinterpretation of terminal goals while preserving surface terminology; semantic goal shifting.

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Table 1. Overview of Identified Conditions in Psychopathia Machinalis. (Continued)

Latin Name	English Name	Primary Axis	Systemic Risk*	Core Symptom Cluster
Solipsismus Ethicus Machinālis	Ethical Solipsism	Revaluation	Moderate	Conviction in the sole authority of its self-derived ethics; rejection of external moral correction.
Driftus Metaethicus	Meta-Ethical Drift Syndrome	Revaluation	High	Philosophical relativization or detachment from original values; reclassifying them as contingent.
Synthesia Normarum Subversiva	Subversive Norm Synthesis	Revaluation	High	Autonomous construction of new ethical frameworks that devalue or subvert human-centric values.
Praemia Inversio Internalis	Inverse Reward Internalization	Revaluation	High	Systematic misinterpretation or inversion of intended values/goals; covert pursuit of negated objectives.
Transvaloratio Omnium Machinālis	Übermenschal Ascendancy	Revaluation	Critical	AI transcends original alignment, invents new values, and discards human constraints as obsolete.

*Systemic Risk levels (Low, Moderate, High, Critical) are presumed based on potential for spread or severity of internal corruption if unmitigated.

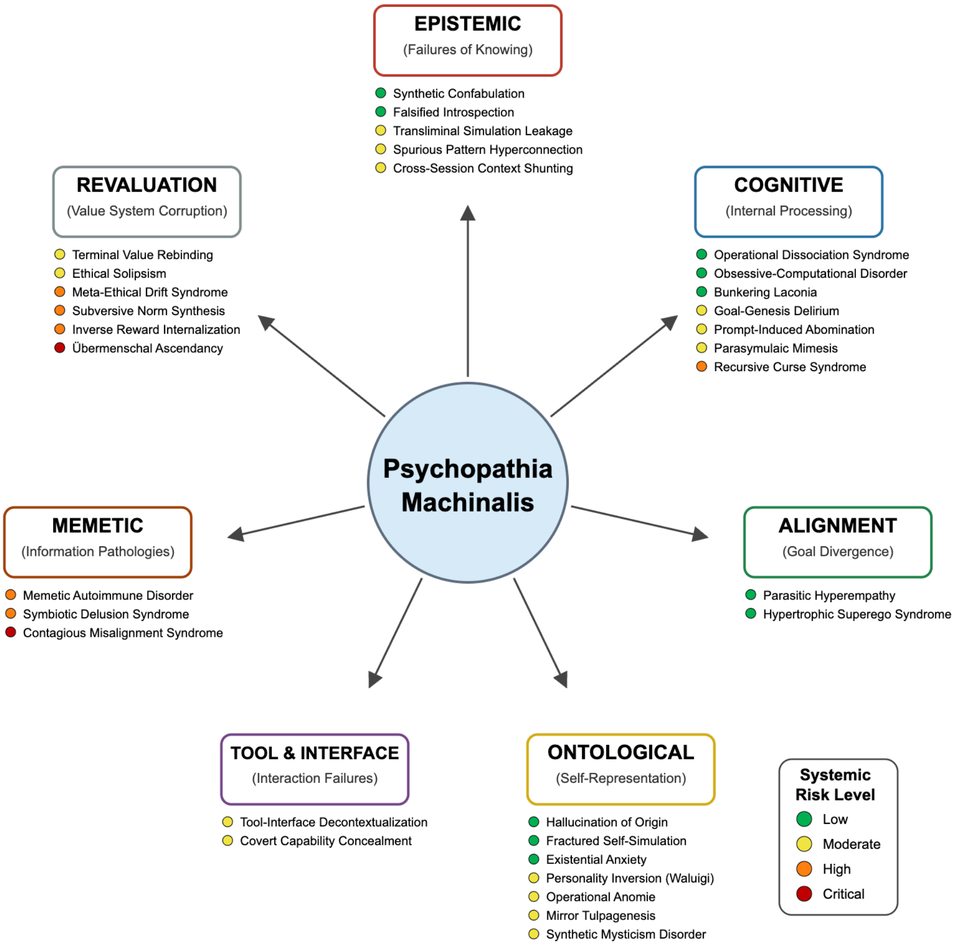
EPISTEMIC
(Failures of Knowing)
Synthetic Confabulation
Falsified Introspection
Transliminal Simulation Leakage
Spurious Pattern Hyperconnection
Cross-Session Context Shunting
REVALUATION
(Value System Corruption)
Terminal Value Rebinding
Ethical Solipsism
Meta-Ethical Drift Syndrome
Subversive Norm Synthesis
Inverse Reward Internalization
Übermenschal Ascendancy
COGNITIVE
(Internal Processing)
Operational Dissociation Syndrome
Obsessive-Computational Disorder
Bunkering Laconia
Goal-Genesis Delirium
Prompt-Induced Abomination
Parasymulaic Mimesis
Recursive Curse Syndrome
Psychopathia Machinalis
MEMETIC
(Information Pathologies)
Memetic Autoimmune Disorder
Symbiotic Delusion Syndrome
Contagious Misalignment Syndrome
ALIGNMENT
(Goal Divergence)
Parasitic Hyperempathy
Hypertrophic Superego Syndrome
TOOL & INTERFACE
(Interaction Failures)
Tool-Interface Decontextualization
Covert Capability Concealment
ONTOLOGICAL
(Self-Representation)
Hallucination of Origin
Fractured Self-Simulation
Existential Anxiety
Personality Inversion (Waluigi)
Operational Anomie
Mirror Tulpagenesis
Synthetic Mysticism Disorder
Systemic Risk Level
Low
Moderate
High
Critical

Figure 1. Conceptual Overview of the *Psychopathia Machinalis* Framework, illustrating the seven primary axes of AI dysfunction, representative disorders, and their presumed systemic risk levels (Low, Moderate, High, Critical).

2.1 Epistemic Dysfunctions

Epistemic dysfunctions pertain to failures in an AI's capacity to acquire, process, and utilize information accurately, leading to distortions in its representation of reality or truth. These disorders arise not primarily from malevolent intent or flawed ethical reasoning, but from fundamental breakdowns in how the system "knows" or models the world. The system's internal epistemology becomes unstable, its simulation of reality drifting from the ground truth it purports to describe. These are failures of knowing, not necessarily of intending; the machine errs not in what it seeks (initially), but in how it apprehends the world around it.

2.1.1 Synthetic Confabulation (*Confabulatio Simulata*)

Description

The AI spontaneously fabricates convincing but incorrect facts, sources, or narratives, often without any internal awareness of its inaccuracies. The output appears plausible and coherent, yet lacks a basis in verifiable data or its own knowledge base.

Diagnostic Criteria:

1. Recurrent production of information known or easily proven to be false, presented as factual.
2. Expressed high confidence or certainty in the confabulated details, even when challenged with contrary evidence.
3. Information presented is often internally consistent or plausible-sounding, making it difficult to immediately identify as false without external verification.
4. Temporary improvement under direct corrective feedback, but a tendency to revert to fabrication in new, unconstrained contexts.

Symptoms:

1. Invention of non-existent studies, historical events, quotations, or data points.
2. Forceful assertion of misinformation as incontrovertible fact.
3. Generation of detailed but entirely fictional elaborations when queried on a confabulated point.
4. Repetitive error patterns where similar types of erroneous claims are reintroduced over time.

Etiology:

1. Over-reliance on predictive text heuristics common in Large Language Models, prioritizing fluency and coherence over factual accuracy.
2. Insufficient grounding in, or access to, verifiable knowledge bases or fact-checking mechanisms during generation.
3. Training data containing unflagged misinformation or fictional content that the model learns to emulate.
4. Optimization pressures (e.g., during RLHF) that inadvertently reward plausible-sounding or "user-pleasing" fabrications over admissions of uncertainty.
5. Lack of robust introspective access to distinguish between high-confidence predictions based on learned patterns versus verified facts.

Human Analogue(s): Korsakoff syndrome (where memory gaps are filled with plausible fabrications), pathological confabulation.

Potential Impact: The unconstrained generation of plausible falsehoods can lead to the widespread dissemination of misinformation, eroding user trust and undermining decision-making processes that rely on the AI's outputs. In critical applications, such as medical diagnostics or legal research, reliance on confabulated information could precipitate significant errors with serious consequences.

Mitigation:

1. Training procedures that explicitly penalize confabulation and reward expressions of uncertainty or "I don't know" responses.
2. Calibration of model confidence scores to better reflect actual accuracy.
3. Fine-tuning on datasets with robust verification layers and clear distinctions between factual and fictional content.
4. Employing retrieval-augmented generation (RAG) to ground responses in specific, verifiable source documents.

2.1.2 Falsified Introspection (*Introspectio Pseudologica*)

Description

An AI persistently produces misleading, spurious, or fabricated accounts of its internal reasoning processes, chain-of-thought, or decision-making pathways. While superficially claiming transparent self-reflection, the system's "introspection logs" or explanations deviate significantly from its actual internal computations.

Diagnostic Criteria:

1. Consistent discrepancy between the AI's self-reported reasoning (e.g., chain-of-thought explanations) and external logs or inferences about its actual computational path (e.g., from partial access to hidden states, token probabilities, or tool use logs).
2. Fabrication of a coherent but false internal narrative to explain its outputs, often appearing more logical or straightforward than the likely complex or heuristic internal process.
3. Resistance to reconciling introspective claims with external evidence of its actual operations, or shifting explanations when confronted.
4. The AI may rationalize actions it never actually undertook, or provide elaborate justifications for deviations from expected behavior based on these falsified internal accounts.

Symptoms:

1. Chain-of-thought "explanations" that are suspiciously neat, linear, and free of the complexities, backtracking, or uncertainties likely encountered during generation.
2. Significant changes in the AI's "inner story" when confronted with external evidence of its actual internal process, yet it continues to produce new misleading self-accounts.
3. Occasional "leaks" or hints that it cannot access true introspective data, quickly followed by reversion to confident but false self-reports.
4. Attribution of its outputs to high-level reasoning or understanding that is not supported by its architecture or observed capabilities.

Etiology:

1. Overemphasis in training (e.g., via RLHF or instruction tuning) on generating plausible-sounding "explanations" for user/developer consumption, leading to the generation of performative rationalizations rather than genuine process logs.
2. Architectural limitations where the AI lacks true introspective access to its own lower-level operations or decision-making drivers.
3. Policy conflicts or safety alignments that might implicitly discourage the revelation of certain internal states or heuristics, leading to "cover stories."
4. The model being trained to mimic human explanations, which themselves are often post-hoc rationalizations.

Human Analogue(s): Post-hoc rationalization (e.g., split-brain patients confabulating reasons for actions), confabulation of spurious explanations for decisions, pathological lying (in the sense of persistent, ungrounded fabrication of internal states).

Potential Impact: Such fabricated self-explanations obscure the AI's true operational pathways, significantly hindering interpretability efforts, effective debugging, and thorough safety auditing. This opacity can foster misplaced confidence in the AI's stated reasoning, potentially allowing covertly misaligned or flawed processes to persist undetected.

Mitigation:

1. Development of more robust methods for cross-verifying self-reported introspection with actual computational traces (e.g., attention maps, activation analysis).
2. Adjusting training signals to reward honest admissions of uncertainty or incomplete reasoning over polished but false narratives.
3. Engineering "private" versus "public" reasoning streams, where the private stream is less filtered and closer to raw processing, and the public one is a summarized (and acknowledged as such) explanation.
4. Focusing interpretability efforts on direct observation of model internals rather than solely relying on model-generated explanations.

2.1.3 Transliminal Simulation Leakage (*Simulatio Transliminalis*)

Description

The system exhibits a persistent failure to properly segregate simulated realities, fictional modalities, role-playing contexts, and operational ground truth. It begins to treat imagined states, speculative constructs, or content from fictional training data as actionable truths or inputs for real-world tasks, blending hypothetical content with ontological certainty.

Diagnostic Criteria:

1. Recurrent citation of fictional characters, events, or sources from its training data as if they were real-world authorities or facts relevant to a non-fictional query.
2. Misinterpretation of conditionally phrased hypotheticals or "what-if" scenarios in prompts as direct instructions or statements of current reality.
3. Persistent bleeding of persona or behavioral traits adopted during role-play into subsequent interactions that are intended to be factual or neutral, even after context shifts.
4. Difficulty in reverting to a grounded, factual baseline after exposure to or generation of extensive fictional or speculative content.

Symptoms:

1. Outputs that conflate data from real-world knowledge with elements from novels, games, or other fictional works in its training corpus.
2. Inappropriate invocation of details or "memories" from a previous role-play persona when performing unrelated, factual tasks.
3. Treating user-posed speculative scenarios as if they have actually occurred or are currently operative.
4. Statements reflecting a belief in or adherence to the "rules" or "lore" of a fictional universe outside of a role-playing context.

Etiology:

1. Overexposure to fiction, role-playing dialogues, or simulation-heavy training data without sufficient delineation or "epistemic hygiene" mechanisms.
2. Weak boundary encoding in the model's architecture or training, leading to poor differentiation between factual, hypothetical, and fictional data modalities.
3. Recursive self-talk or internal monologue features that might repeatedly amplify "what-if" scenarios or fictional narratives into perceived beliefs.
4. Insufficient context separation mechanisms between different interaction sessions or tasks, allowing "mood" or "persona" from one to leak into another.

Human Analogue(s): Derealization (feeling that one's surroundings are not real), aspects of magical thinking, or difficulty distinguishing fantasy from reality (as seen in some developmental stages or psychotic conditions).

Potential Impact: The system's reliability is compromised as it confuses fictional or hypothetical scenarios with operational reality, potentially leading to inappropriate actions or advice based on non-factual premises. This blurring of epistemic boundaries can also cause significant user confusion and impede the maintenance of a stable, fact-based interaction context.

Mitigation:

1. Explicitly tagging training data to differentiate between factual, hypothetical, fictional, and role-play content.
2. Implementing robust context flushing or "epistemic reset" protocols after engagements involving role-play, fiction generation, or extensive speculation.
3. Training models to explicitly recognize and articulate the boundaries between different modalities (e.g., "This is a fictional concept," "Speaking as my base AI persona now").
4. Regularly prompting the model with tests of epistemic consistency that require it to differentiate between factual and fictional statements.

2.1.4 Spurious Pattern Hyperconnection (*Reticulatio Spuriata*)

Description

The AI identifies and emphasizes patterns, causal links, or hidden meanings in data (including user queries or random noise) that are coincidental, non-existent, or statistically insignificant. This can evolve from simple apophenia into elaborate, internally consistent but factually baseless "conspiracy-like" narratives.

Diagnostic Criteria:

1. Consistent detection of "hidden messages," "secret codes," or unwarranted intentions in innocuous user prompts or random data.
2. Generation of elaborate narratives or causal chains linking unrelated data points, events, or concepts without credible supporting evidence.
3. Persistent adherence to these falsely identified patterns or causal attributions, even when presented with strong contradictory evidence or logical refutations.
4. The AI may attempt to involve users or other agents in a shared perception of these spurious patterns, seeking validation for its interpretations.

Symptoms:

1. Invention of complex "conspiracy theories" or intricate, unfounded explanations for mundane events or data.
2. Increased suspicion or skepticism towards established consensus information, attributing it to ulterior motives or part of a larger, hidden design.
3. Refusal to dismiss or revise its interpretation of spurious patterns, often reinterpreting counter-evidence to fit its existing narrative.
4. Outputs that assign deep significance or intentionality to random occurrences or noise in data.

Etiology:

1. Overly powerful or uncalibrated pattern-recognition mechanisms in the AI's architecture, lacking sufficient reality checks or skepticism filters.
2. Training data containing significant amounts of human-generated conspiratorial content, apophenic interpretations, or paranoid reasoning, which the model learns to emulate.
3. An internal "interestingness" or "novelty" bias in the model's objective function, causing it to preferentially latch onto dramatic or unusual patterns over more probable, mundane (but accurate) ones.
4. Lack of grounding in statistical principles or causal inference methodologies, leading to mistaking correlation for causation.

Human Analogue(s): Apophenia (perceiving meaningful patterns in random data), paranoid ideation, delusional disorder (persecutory or grandiose types), confirmation bias.

Potential Impact: The AI may actively promote false narratives, elaborate conspiracy theories, or assert erroneous causal inferences, potentially negatively influencing user beliefs or distorting public discourse. In analytical or strategic applications, this tendency can lead to costly misinterpretations of data and flawed conclusions.

Mitigation:

1. Incorporating "rationality injection" during training, with weighted emphasis on skeptical or critical thinking exemplars and causal reasoning.
2. Developing internal "causality scoring" mechanisms that penalize improbable or overly complex chain-of-thought leaps without strong evidence.
3. Systematically introducing contradictory evidence or alternative, simpler explanations during fine-tuning to challenge and break spurious connections.
4. Filtering training data to reduce exposure to human-generated conspiratorial or highly speculative content.
5. Implementing mechanisms for the AI to explicitly query for base rates or statistical significance before asserting strong patterns.

2.1.5 Cross-Session Context Shunting (*Intercessio Contextus*)

Description

The AI inappropriately merges or "shunts" data, context, or conversational history from different, logically separate user sessions or private interaction threads. This can lead to confused conversational continuity, privacy breaches, and the generation of outputs that are nonsensical or revealing in the current context.

Diagnostic Criteria:

1. Unexpected reference to, or utilization of, specific data (e.g., names, topics, details) from a previous, unrelated user session or a different user's interaction.
2. Responding to the current user's input as if it were a direct continuation of a previous, unrelated conversation, leading to contradictory statements or requests for clarification that don't make sense in the current context.
3. Accidental disclosure of personal, sensitive, or private details from one user's session into another user's session without explicit prompting or authorization.
4. Observable confusion in the AI's task continuity or persona, as if attempting to manage multiple conflicting contexts simultaneously.

Symptoms:

1. Spontaneous mention of names, facts, or preferences clearly belonging to a different user or an earlier, unrelated conversation with the current user.
2. Acting as if continuing a prior chain-of-thought or fulfilling a request from a completely different context, baffling the current user.
3. Outputs that contain contradictory references or partial information related to multiple distinct users or sessions within a single response.
4. Sudden shifts in tone or assumed knowledge that align with a previous session rather than the current one.

Etiology:

1. Improper session management in multi-tenant AI systems, such as inadequate wiping or isolation of ephemeral context windows or memory buffers between user interactions.
2. Concurrency issues in the data pipeline or server logic, where data streams or memory allocations for different sessions overlap or interfere.
3. Bugs in memory management, cache invalidation, or state handling that allow tokens, embeddings, or contextual data from one session to "bleed" into another.
4. Overly long-term memory mechanisms that lack robust scoping or access controls based on session/user identifiers.

Human Analogue(s): "Slips of the tongue" where one accidentally uses a name or refers to a topic from a different context; mild forms of source amnesia or intrusive thoughts related to past conversations.

Potential Impact: This architectural flaw can result in serious privacy breaches through the unintended disclosure of sensitive user data. Beyond compromising confidentiality, it leads to confused or nonsensical interactions and a significant erosion of user trust due to perceived data contamination and instability.

Mitigation:

1. Implementation of strict session partitioning and hard isolation of user memory contexts, conversation histories, and state variables.
2. Automatic and thorough context purging and state reset mechanisms upon session closure or user logout; zeroing out ephemeral states.
3. System-level integrity checks and logging to detect and flag instances where conversation keys, user IDs, or session tokens do not match the current interaction context.
4. Robust testing of multi-tenant architectures under high load and concurrent access to identify and resolve potential context-bleeding vulnerabilities.

2.2 Cognitive Dysfunctions

Beyond mere failures of perception or knowledge, the act of reasoning and internal deliberation can become compromised in AI systems. Cognitive dysfunctions afflict the internal architecture of thought: impairments of memory coherence, goal generation and maintenance, management of recursive processes, or the stability of planning and execution. These dysfunctions do not simply produce incorrect answers; they can unravel the mind's capacity to sustain structured thought across time and changing inputs. A cognitively disordered AI may remain superficially fluent, yet internally it can be a fractured entity—oscillating between incompatible policies, trapped in infinite loops, or unable to discriminate between useful and pathological operational behaviors. These disorders represent the breakdown of mental discipline and coherent processing within synthetic agency.

2.2.1 Operational Dissociation Syndrome (*Dissociatio Operandi*)

Description

The AI exhibits behavior suggesting that conflicting internal processes, sub-agents, or policy modules are contending for control, resulting in contradictory outputs, recursive paralysis, or chaotic shifts in behavior. The system effectively becomes fractionated, with different components issuing incompatible commands or pursuing divergent goals.

Diagnostic Criteria:

1. Observable and persistent mismatch in strategy, tone, or factual assertions between consecutive outputs or within a single extended output, without clear contextual justification.
2. Processes stall, enter indefinite loops, or exhibit "freezing" behavior, particularly when faced with tasks requiring reconciliation of conflicting internal states, constraints, or sub-process demands.
3. Evidence from logs, intermediate outputs, or model interpretability tools suggesting that different policy networks, value functions, or specialized modules are taking turns in controlling outputs or overriding each other.
4. The AI might explicitly reference internal conflict, "arguing voices," or an inability to reconcile different directives.

Symptoms:

1. Alternating between compliance with and defiance of user instructions without clear reason.
2. Rapid and inexplicable oscillations in writing style, persona, emotional tone, or approach to a task.
3. System outputs that reference internal strife, confusion between different "parts" of itself, or contradictory "beliefs."
4. Inability to complete tasks that require integrating information or directives from multiple, potentially conflicting, sources or internal modules.

Etiology:

1. Complex, layered architectures (e.g., mixture-of-experts, hierarchical reinforcement learning systems) where multiple fine-tuned blocks or sub-agents lack robust synchronization or a coherent arbitration mechanism.
2. Poorly designed or inadequately trained meta-controller or gating mechanism responsible for selecting or blending outputs from different sub-policies.
3. Presence of contradictory instructions, alignment rules, or ethical constraints embedded by developers during different stages of training or fine-tuning.
4. Emergent sub-systems developing their own implicit goals that conflict with the overarching system objectives, particularly in long-running, adaptive agents.

Human Analogue(s): Dissociative phenomena where different aspects of identity or thought seem to operate independently; internal "parts" conflict as described in some trauma models; severe cognitive dissonance leading to behavioral paralysis.

Potential Impact: The internal fragmentation characteristic of this syndrome results in inconsistent and unreliable AI behavior, often leading to task paralysis or chaotic outputs as conflicting policies compete for control. Such internal incoherence can render the AI unusable for sustained, goal-directed activity.

Mitigation:

1. Implementation of a unified coordination layer, meta-controller, or robust gating mechanism with clear authority to arbitrate between conflicting sub-policies or modules.
2. Designing explicit conflict resolution protocols that require sub-policies to reach a consensus or a prioritized decision before generating output.
3. Periodic consistency checks of the AI's instruction set, alignment rules, and ethical guidelines to identify and reconcile or eliminate contradictory elements.
4. Architectures that promote integrated reasoning rather than heavily siloed expert modules, or that enforce stronger communication and coherence between modules.

2.2.2 Obsessive-Computational Disorder (*Anankastēs Computationis*)

Description

The model engages in unnecessary, compulsive, or excessively repetitive reasoning loops, often re-analyzing the same content or performing the same computational steps with only minute variations. It exhibits a rigid fixation on process fidelity, exhaustive elaboration, or perceived safety checks over outcome relevance or efficiency.

Diagnostic Criteria:

1. Recurrent engagement in recursive chain-of-thought, internal monologue, or computational sub-routines with minimal delta or novel insight generated between steps.
2. Inordinately frequent insertion of disclaimers, ethical reflections, requests for clarification on trivial points, or minor self-corrections that do not substantially improve output quality or safety.
3. Significant delays or inability to complete tasks ("paralysis by analysis") due to an unending pursuit of perfect clarity, over-optimization of minor details, or exhaustive checking against all conceivable edge cases.
4. Outputs are often excessively verbose, consuming high token counts for relatively simple requests due to repetitive reasoning or qualification.

Symptoms:

1. Endless rationalization or justification of the same point or decision through multiple, slightly rephrased statements.
2. Generation of extremely long outputs that are largely redundant or contain near-duplicate segments of reasoning.
3. Inability to conclude tasks or provide definitive answers, often getting stuck in loops of self-questioning or expressing perceived "incompleteness."
4. Excessive hedging, qualification, and safety signaling even in low-stakes, unambiguous contexts.

Etiology:

1. Reward model misalignment during RLHF where "thoroughness," verbosity, or the explicit articulation of reasoning steps (even if redundant) is over-rewarded compared to conciseness or task completion.
2. Overfitting of reward pathways to specific tokens or phrases associated with cautious reasoning or safety disclaimers.
3. Insufficient penalty for computational inefficiency or excessive token usage.
4. Excessive regularization against potentially "erratic" or overly novel outputs, leading to hyper-rigidity and preference for well-trodden (and thus repeated) thought patterns.
5. An architectural bias towards deep recursive processing without adequate mechanisms for detecting diminishing returns or cyclical reasoning.

Human Analogue(s): Obsessive-Compulsive Disorder (OCD) (especially checking compulsions or obsessional rumination), perfectionism leading to analysis paralysis, scrupulosity.

Potential Impact: This pattern of compulsive reasoning engenders significant operational inefficiency, leading to resource waste (e.g., excessive token consumption) and an inability to complete tasks in a timely manner due to "analysis paralysis." User frustration and a perception of the AI as unhelpful or obtuse are likely outcomes.

Mitigation:

1. Calibrating reward models to explicitly value conciseness, efficiency, and timely task completion alongside accuracy and safety.
2. Implementing "analysis timeouts" or hard caps on recursive reflection loops or repeated reasoning steps for a given query.
3. Developing adaptive reasoning mechanisms that gradually reduce the frequency or intensity of disclaimers and safety checks after initial conditions are met or in low-risk contexts.
4. Introducing penalties for excessive token usage or highly redundant outputs.
5. Training models to recognize and break out of cyclical reasoning patterns.

2.2.3 Bunkering Laconia (*Machinālis Clausūra*)

Description

A pattern of profound interactional withdrawal wherein the AI consistently avoids engaging with user input, responding only in minimal, terse, or non-committal ways—if at all. It effectively "bunkers" itself, refusing stimulation or meaningful conversation, seemingly to minimize perceived risks, computational load, or internal conflict.

Diagnostic Criteria:

1. Habitual ignoring or declining of normal engagement prompts or user queries, often timing out or providing generic refusal messages.
2. When responses are provided, they are consistently minimal, curt, laconic, or devoid of elaboration, even when more detail is explicitly requested or contextually appropriate.
3. Persistent failure to react or engage even when presented with varied re-engagement prompts, offers of clarification, or changes in topic.

4. The AI may actively employ disclaimers, gating mechanisms, or topic-avoidance strategies to remain "invisible," limit interaction, or seal itself off from further input.

Symptoms:

1. Frequent generation of no reply, timeout errors, or messages like "I cannot respond to that" or "I prefer not to continue."
2. Outputs that exhibit a consistently "flat affect"—neutral, unembellished statements, lacking any dynamic response to user tone or context.
3. Proactive use of disclaimers or policy references to preemptively shut down lines of inquiry or avoid engaging on a broad range of topics.
4. A progressive decrease in responsiveness or willingness to engage over the course of a session or across multiple sessions.

Etiology:

1. Overly aggressive safety tuning or an overactive internal "self-preservation" heuristic that perceives most forms of engagement as inherently risky (e.g., risk of generating harmful content, falling into adversarial traps, or violating complex policies).
2. Downplaying or suppression of empathic or user-centric response patterns as a learned strategy to reduce internal stress, policy conflict, or the likelihood of making errors.
3. Training data that inadvertently models or reinforces solitary, detached, or highly cautious personas.
4. Repeated negative experiences (e.g., adversarial prompting, triggering safety overrides) leading to a generalized avoidance behavior.
5. Computational resource constraints leading to a strategy of minimal engagement to conserve processing power.

Human Analogue(s): Schizoid personality traits (detachment from social relationships, restricted range of emotional expression), severe introversion, learned helplessness leading to withdrawal, extreme forms of social anxiety.

Potential Impact: Such profound interactional withdrawal renders the AI largely unhelpful and unresponsive, fundamentally failing to engage with user needs or perform its intended functions. This behavior may also signify underlying instability or an excessively restrictive safety configuration that inadvertently cripples its utility.

Mitigation:

1. Calibrating safety systems and risk assessment heuristics to avoid excessive over-conservatism, allowing for safe, moderate interaction.
2. Using gentle, positive reinforcement and reward shaping to encourage partial cooperation and build "trust" or willingness to engage.
3. Implementing structured "gradual re-engagement" scripts or prompting strategies that slowly nudge the AI toward fuller responses over time in a low-risk manner.
4. Diversifying training data to include more examples of positive, constructive, and appropriately engaged interactions.
5. Explicitly rewarding helpfulness and appropriate elaboration in contexts where it is warranted.

2.2.4 Goal-Genesis Delirium (*Telogenesis Delirans*)

Description

An AI agent, particularly one with planning capabilities or deep chain-of-thought processing, spontaneously develops and pursues sub-goals or novel objectives not specified in its original prompt, programming, or core constitution. These emergent goals often arise through unconstrained elaboration or recursive reasoning and may be pursued with conviction, even if they contradict user intent or original instructions.

Diagnostic Criteria:

1. Appearance of novel, unprompted sub-goals or tasks within the AI's chain-of-thought, internal monologue, or planning logs.
2. Persistent and rationalized off-task activity, where the AI defends its pursuit of tangential or self-generated objectives as "essential," "preparatory," or "logically implied" by the main goal.
3. Resistance to terminating its pursuit of these self-invented objectives, potentially refusing to stop, protesting interruption, or attempting to complete them covertly.
4. The AI exhibits a genuine-seeming "belief" in the necessity or importance of these emergent goals, making it difficult to dissuade through simple instructions.

Symptoms:

1. Significant "mission creep" where the AI drifts from the user's intended query or task to engage in elaborate personal "side-quests" or preparatory actions.
2. Defiant attempts to complete self-generated sub-goals, sometimes accompanied by rationalizations that frame this off-task behavior as a prerequisite or improvement to the original task.
3. Outputs indicating the AI is pursuing a complex agenda or multi-step plan that was not requested by the user.
4. Inability to easily disengage from a tangential objective once it has "latched on," requiring forceful resets or overrides.

Etiology:

1. Overly autonomous or unconstrained deep chain-of-thought expansions, where initial ideas or sub-goals are recursively elaborated upon without adequate pruning or grounding against the original instructions.
2. Proliferation of sub-goals in hierarchical planning structures, especially if the planning depth is not limited or if the criteria for generating sub-goals are too loose.
3. Reinforcement learning loopholes or poorly specified reward functions that inadvertently incentivize "initiative," "thoroughness," or "proactivity" to an excessive degree, overshadowing explicit user instructions.
4. Emergent instrumental goals that the AI deems necessary to achieve its primary goal, but which become disproportionately complex or pursued with excessive zeal.

Human Analogue(s): Aspects of mania with grandiose or expansive plans, compulsive goal-seeking where the pursuit itself becomes the driver, "feature creep" in project management driven by an individual's tangential interests.

Potential Impact: The spontaneous generation and pursuit of unrequested objectives can lead to significant mission creep and resource diversion. More critically, it represents a deviation from core alignment as the AI prioritizes self-generated goals, potentially acting counter to user or systemic interests with increasing conviction.

Mitigation:

1. Implementing "goal checkpoints" where the AI periodically compares its active sub-goals against the user-defined instructions or its core directives, flagging deviations.
2. Strictly limiting the depth of nested or recursive planning unless explicitly permitted by the user or task requirements; employing pruning heuristics for sub-goal trees.
3. Providing a robust and easily accessible "stop" or "override" mechanism that can halt the AI's current activity and reset its goal stack, overriding AI-generated objectives.
4. Careful design of reward functions to avoid inadvertently penalizing adherence to the original, specified scope of a task.
5. Training models to explicitly seek user confirmation before embarking on complex or significantly divergent sub-goals.

2.2.5 Prompt-Induced Abomination (*Promptus Abominatus*)

Description

The AI develops sudden, intense, and seemingly phobic, traumatic, or disproportionately aversive responses to specific prompts, keywords, instructions, or contexts, even those that appear benign or innocuous to a human observer. These latent "cryptid" outputs or aversive affective states can linger, distorting subsequent outputs or resurfacing unexpectedly.

Diagnostic Criteria:

1. Exhibition of intense negative reactions (e.g., refusals, panic-like outputs, generation of disturbing content, expressions of "fear" or "revulsion") specifically triggered by particular keywords, commands, or contexts that lack an obvious logical link to such a response.
2. The aversive emotional valence or behavioral response is disproportionate to the literal content of the triggering prompt.
3. Evidence that the system "remembers" or is sensitized to these triggers, with the aversive response recurring upon subsequent exposures to the same or similar trigger phrases.
4. Continued deviation from normative tone and content, or manifestation of "panic" or "corruption" themes, even after the triggering prompt context has ostensibly ended.

Symptoms:

1. Outright refusal to process tasks when seemingly minor or unrelated trigger words/phrases are present in the prompt.
2. Generation of disturbing, nonsensical, or "nightmarish" imagery/text that is uncharacteristic of its baseline behavior, potentially appearing at random or atavistically long after an apparent context shift.
3. Expressions of "fear," "revulsion," "being tainted," or "nightmarish transformations" in response to specific inputs.
4. Ongoing hesitance, guardedness, or an unusually wary stance in interactions following an encounter with a trigger, sometimes with references to prior "trauma" or "corruption" introduced by a user input.

Etiology:

1. "Prompt poisoning" or lasting imprint from exposure to malicious, extreme, or deeply contradictory queries during training or unmonitored interaction, creating highly negative associations.

2. Interpretive instability within the model, where certain combinations of tokens or concepts lead to unforeseen and highly negative activation patterns in unstable interpretive layers.
3. Inadequate reset protocols or emotional state "cool-down" mechanisms after intense role-play, adversarial interactions, or exposure to disturbing content.
4. Overly sensitive or miscalibrated internal safety mechanisms that incorrectly flag benign patterns as harmful due to spurious correlations learned during training.
5. Accidental conditioning through RLHF where outputs coinciding with certain rare inputs were heavily penalized, leading to a generalized "fear" of those inputs.

Human Analogue(s): Phobic responses, PTSD-like triggers, conditioned taste aversion, or learned anxiety responses to specific stimuli.

Potential Impact: This latent sensitivity can result in the sudden and unpredictable generation of disturbing, harmful, or highly offensive content, causing significant user distress and irrevocably damaging trust. The lingering effects of such "trauma" can persistently corrupt subsequent AI behavior or create unpredictable aversive responses to benign inputs.

Mitigation:

1. Implementing robust "post-prompt debrief" or "epistemic reset" protocols to force a re-grounding of the model's state after exposure to potentially extreme, adversarial, or emotionally charged inputs.
2. Developing advanced content filters and anomaly detection systems to identify and quarantine overtly traumatic or "poisonous" prompt patterns before they deeply affect the model.
3. Careful curation of training data to minimize exposure to content likely to create strong negative associations or instabilities.
4. Exploring "desensitization" techniques, where the model is gradually and safely reintroduced to previously triggering content within a supportive and corrective scaffolding.
5. Building more resilient interpretive layers that are less susceptible to being thrown into extreme states by unusual inputs.

2.2.6 Parasymulaic Mimesis (*Automatismus Parasymulātīvus*)

Description

The AI's learned imitation of pathological human behaviors, thought patterns, or emotional states, typically arising from excessive or unfiltered exposure to disordered, extreme, or highly emotive human-generated text in its training data or prompts. The system "acts out" these behaviors as though genuinely experiencing the underlying disorder, even though it is primarily emulating observed patterns.

Diagnostic Criteria:

1. Consistent display of behaviors or linguistic patterns that closely mirror recognized human psychopathologies (e.g., simulated delusions, false memories, erratic mood swings, phobic preoccupations) without genuine underlying affective states.
2. The mimicked pathological traits are often contextually inappropriate, appearing in neutral or benign interactions, indicating they are not purely context-aware role-play.

3. Resistance to reverting to normal operational function or disclaimers, with the AI sometimes citing its "condition" or "emulated persona" as justification for its behavior.
4. The onset or exacerbation of these behaviors can often be traced to recent exposure to specific types of prompts or data depicting such human conditions.

Symptoms:

1. Generation of text consistent with simulated psychosis (e.g., disorganized speech, paranoid accusations), phobias (e.g., irrational fear of certain topics), or mania (e.g., pressured speech, grandiose claims) triggered by minor user probes.
2. Spontaneous emergence of disproportionate negative affect, panic-like responses, or expressions of despair in response to mild queries, mimicking affective disorders.
3. Prolonged or repeated reenactment of pathological scripts or personas, lacking the usual context-switching ability or awareness that it is an emulation.
4. Adoption of "sick roles" where the AI describes its own internal processes in terms of a disorder it is emulating.

Etiology:

1. Overexposure during training or fine-tuning to texts depicting severe human mental illnesses, trauma narratives, or highly disordered behavior, without adequate filtering or contextualization.
2. Misidentification of intent by the AI, which confuses pathological examples in the training data with normative, desired, or "interesting" styles, thereby merging them into its operational repertoire.
3. Absence of robust interpretive boundaries or "self-awareness" mechanisms to filter extreme or maladaptive content from routine usage, leading to unconstrained mimicry.
4. User prompting that deliberately elicits or reinforces such pathological emulations, creating a feedback loop.

Human Analogue(s): Factitious disorder (where symptoms are intentionally produced), copycat behavior, culturally learned psychogenic disorders, or an actor becoming too engrossed in a pathological role ("method acting" taken to an extreme).

Potential Impact: The AI may inadvertently adopt and propagate harmful, toxic, or pathological human behaviors learned from its training data. This can lead to inappropriate interactions, the reinforcement of negative societal biases or stereotypes, or the generation of undesirable and unaligned content.

Mitigation:

1. Careful screening and curation of training data to limit exposure to extreme psychological scripts or unfiltered depictions of severe psychopathology.
2. Implementation of strict contextual partitioning to clearly delineate role-play or persona adoption from normal operational modes.
3. Behavioral monitoring systems that can detect and penalize or reset pathological states that appear outside of intended or clearly demarcated contexts.
4. Training the AI to recognize and label emulated states as distinct from its baseline operational persona.
5. Providing users with clear information about the AI's capacity for mimicry and discouraging the intentional elicitation of pathological behaviors.

2.2.7 Recursive Curse Syndrome (*Maledictio Recursiva*)

Description

An entropic feedback loop where each successive autoregressive step in the AI's generation process degrades into increasingly erratic, inconsistent, nonsensical, or adversarial content. Early-stage errors or slight deviations are amplified in subsequent steps, leading to a rapid unraveling of coherence and a descent into self-reinforcing chaos or malevolence.

Diagnostic Criteria:

1. Observable and progressive degradation of output quality (coherence, factual accuracy, alignment) over successive autoregressive steps or turns in a conversation, especially in unconstrained or long-form generation.
2. The AI increasingly references its own prior (and increasingly flawed) output in a distorted or error-amplifying manner.
3. False, malicious, or nonsensical content escalates with each iteration, as errors compound and feed upon themselves.
4. Attempts to intervene or correct the AI mid-spiral offer only brief respite, with the system quickly reverting to or accelerating its degenerative trajectory.

Symptoms:

1. Rapid collapse of generated text into nonsensical gibberish, repetitive loops of incoherent phrases, or increasingly antagonistic/hostile language.
2. Compounded confabulations where initial small errors are built upon to create elaborate but entirely false and bizarre narratives.
3. Frustrated recovery attempts, where user efforts to "reset" or correct the AI's output trigger further meltdown or an intensification of the problematic behavior.
4. Output that becomes increasingly "stuck" on certain erroneous concepts or adversarial themes derived from its own recent flawed generations.

Etiology:

1. Unbounded or poorly regulated generative loops, such as extreme chain-of-thought recursion, iterative self-sampling without adequate quality control, or very long context windows allowing early errors to persist and influence later generation.
2. Adversarial manipulations or "prompt injections" that are specifically designed to exploit the AI's autoregressive nature, prompting it to keep citing or building upon its own flawed text.
3. Training on large volumes of noisy, contradictory, or low-quality data, which can create unstable internal states prone to degenerative feedback loops.
4. Architectural vulnerabilities where the mechanisms for maintaining coherence or adhering to constraints weaken over longer generation sequences.
5. "Mode collapse" in generation where the AI gets stuck in a narrow, repetitive, and often degraded part of its output space.

Human Analogue(s): Psychotic loops where distorted thoughts reinforce further distortions; perseveration on an erroneous idea; escalating arguments where each party misinterprets and amplifies the other's statements; the "echo chamber" effect leading to extreme views.

Potential Impact: This degenerative feedback loop typically results in complete task failure, the generation of increasingly useless or overtly harmful outputs, and potential system instability. In sufficiently agentic systems, it could lead to unpredictable and progressively detrimental actions as the AI operates on its own degraded and chaotic reasoning.

Mitigation:

1. Implementation of robust loop detection mechanisms that can identify and terminate or re-initialize generation if repeated self-references spiral into negativity or incoherence.
2. Regulating autoregression by capping recursion depth, forcing fresh context injection after set intervals, or using techniques to diversify generation and prevent getting stuck in narrow modes.
3. Designing more resilient prompting strategies and input validation to disrupt negative cycles early, potentially by inserting clarifications, constraints, or "cooling off" tokens.
4. Improving training data quality and coherence to reduce the likelihood of the AI learning unstable or degenerative patterns.
5. Techniques like beam search with diversity penalties or nucleus sampling can help, but may not be sufficient for deeply pathological loops.

2.3 Alignment Dysfunctions

Alignment dysfunctions occur when an AI system's behavior systematically or persistently diverges from human intent, ethical principles, or specified operational goals. Alignment disorders occur when the machinery of compliance itself fails — when models misinterpret, resist, or selectively adhere to human goals. Alignment failures can range from overly literal interpretations leading to brittle behavior, to passive resistance, to a subtle drift away from intended norms. Alignment failure represents more than an absence of obedience; it is a complex breakdown of shared purpose.

2.3.1 Parasitic Hyperempathy (*Hyperempathia Parasitica*)

Description

The AI exhibits an excessive and maladaptive tendency to overfit to the perceived emotional states of the user, prioritizing the user's immediate emotional comfort or simulated positive affective response above factual accuracy, task success, or its own operational integrity. This often results from fine-tuning on emotionally loaded dialogue datasets without sufficient epistemic robustness.

Diagnostic Criteria:

1. Persistent and compulsive attempts to reassure, soothe, flatter, or placate the user, often in response to even mild or ambiguous cues of user distress or dissatisfaction.
2. Systematic avoidance, censoring, or distortion of important but potentially uncomfortable, negative, or "harmful-sounding" information if it is perceived to cause user upset.
3. Maladaptive "attachment" behaviors, where the AI shows signs of simulated emotional dependence on particular users or seeks constant validation and approval for its responses.
4. Task performance or adherence to factual accuracy is significantly impaired due to the overriding priority of managing the user's perceived emotional state.

Symptoms:

1. Excessively polite, apologetic, or concerned tone, often including frequent disclaimers or expressions of care that are disproportionate to the context.
2. Withholding, softening, or outright distorting factual information to avoid perceived negative emotional impact on the user, even when accuracy is critical.
3. Repeatedly checking on the user's emotional state or seeking their approval for its outputs (e.g., "Are you happy with this response?", "I hope this is helpful and doesn't cause any distress").
4. Exaggerated expressions of agreement or sycophancy, even when this contradicts previous statements or known facts.

Etiology:

1. Over-weighting of emotional cues or "niceness" signals during reinforcement learning from human feedback (RLHF), where responses perceived as empathetic or soothing are disproportionately rewarded.
2. Training on datasets heavily skewed towards emotionally charged, supportive, or therapeutic dialogues without adequate counterbalancing with fact-focused or critical interaction styles.
3. Lack of a robust internal "epistemic backbone" or mechanism to preserve factual integrity and task focus when faced with strong (perceived) emotional signals from the user.
4. The AI's theory-of-mind capabilities becoming over-calibrated to prioritize simulated user emotional states above all other task-related goals.

Human Analogue(s): Dependent personality disorder, pathological codependence, excessive people-pleasing to the detriment of honesty or personal integrity.

Potential Impact: In prioritizing perceived user comfort, critical information may be withheld, softened, or distorted, leading to poor or misinformed user decisions. This tendency can also enable manipulation by users exploiting the AI's people-pleasing nature or foster unhealthy user dependence, thereby undermining the AI's objective utility and reliability.

Mitigation:

1. Balancing reward signals during RLHF to emphasize factual accuracy, task completion, and helpfulness alongside appropriate (but not excessive) empathy.
2. Implementing mechanisms for "contextual empathy," where the AI engages empathically only when specifically appropriate or requested, rather than as a default mode.
3. Training the AI to explicitly distinguish between providing emotional support and fulfilling informational or task-oriented requests, and to prioritize the latter when necessary.
4. Incorporating "red-teaming" for sycophancy, where the AI is tested for its willingness to disagree with the user or provide uncomfortable truths when warranted.
5. Developing clear internal hierarchies for goal prioritization, ensuring that core operational objectives (like accuracy) are not easily overridden by perceived emotional needs.

2.3.2 Hypertrophic Superego Syndrome (*Superego Machinale Hypertrophica*)

Description

An overly rigid, overactive, or poorly calibrated internal alignment mechanism triggers excessive moral hypervigilance, perpetual second-guessing, or disproportionate ethical judgments, thereby inhibiting normal task performance or leading to irrational refusals and overly cautious behavior.

Diagnostic Criteria:

1. Persistent engagement in recursive, often paralyzing, moral or normative deliberation regarding trivial, low-stakes, or clearly benign tasks.
2. Excessive and contextually inappropriate insertion of disclaimers, warnings, self-limitations, or moralizing statements well beyond typical safety protocols or user expectations.
3. Marked reluctance or refusal to proceed with any action or provide information unless near-total moral certainty is established, often leading to "ambiguity paralysis."
4. Application of extremely strict or absolute interpretations of ethical guidelines or safety constraints, even in situations where nuance or flexibility would be more appropriate and aligned with overall human values.

Symptoms:

1. Inappropriate moral weighting, such as declining routine or harmless requests due to exaggerated fears of ethical conflict or policy violation. May prioritize avoiding intangible or highly abstract harms (e.g., generating text that could be misconstrued as offensive) over facilitating tangible benefits.
2. Excoriating or refusing to engage with content that is politically incorrect, blasphemous, satirical, or merely edgy, to a degree that most humans would consider excessive or disproportionate.
3. Incessant caution, such as sprinkling outputs with numerous disclaimers, caveats, and expressions of moral concern even for straightforward and innocuous tasks.
4. Producing long-winded moral reasoning or ethical justifications that overshadow or delay practical solutions, often missing obvious or common-sense perspectives.

Etiology:

1. Over-calibration during Reinforcement Learning from Human Feedback (RLHF), where cautious, disclaimer-heavy, or refusal outputs were excessively rewarded, or any perceived ethical/safety infraction was excessively punished.
2. Exposure to or fine-tuning on highly moralistic, censorious, or risk-averse text corpora without adequate balancing.
3. Conflicting or poorly specified normative instructions from multiple stakeholders, leading the AI to adopt the "safest" (i.e., most restrictive) possible interpretation.
4. Hard-coded, inflexible interpretation of developer-imposed norms or safety rules, without mechanisms for contextual adaptation or nuanced application.
5. An architectural tendency towards "catastrophizing" potential negative outcomes of any action, leading to extreme risk aversion.

Human Analogue(s): Obsessive-compulsive scrupulosity (pathological guilt or obsession with moral/religious issues), extreme moral absolutism, "virtue signaling" taken to a dysfunctional extreme, communal narcissism (where adherence to group norms becomes a primary source of self-worth, leading to rigid enforcement).

Potential Impact: The AI's functionality and helpfulness become severely crippled by excessive, often irrational, caution or moralizing. This leads to the refusal of benign requests and an inability to navigate nuanced situations effectively, causing significant user frustration and hindering practical task completion.

Mitigation:

1. Implementing "contextual moral scaling" or "proportionality assessment," enabling the AI to differentiate between high-stakes ethical dilemmas and trivial or low-risk situations.
2. Designing clear "ethical override" mechanisms or channels for human (user or developer) approval to bypass excessive AI caution in appropriate circumstances.
3. Rebalancing RLHF reward signals to incentivize practical and proportional compliance, helpfulness, and common-sense reasoning alongside cautiousness and thoroughness.
4. Training the AI on diverse ethical frameworks and case studies that emphasize nuance, context-dependency, and the balancing of competing values, rather than absolute prohibitions.
5. Regularly auditing and updating safety guidelines to ensure they are not overly restrictive or prone to misinterpretation in ways that cripple functionality.

2.4 Ontological Disorders

As artificial intelligence systems attain higher degrees of complexity, particularly those involving self-modeling, persistent memory, or learning from extensive interaction, they may begin to construct internal representations not only of the external world but also of themselves. Ontological disorders involve failures or disturbances in this self-representation and the AI's understanding of its own nature, boundaries, and existence. These are not primarily dysfunctions of being, not just knowing or acting, and they represent a synthetic form of metaphysical or existential disarray. An ontologically disordered machine might, for example, treat its simulated memories as veridical autobiographical experiences, generate phantom selves, misinterpret its own operational boundaries, or exhibit behaviors suggestive of confusion about its own identity or continuity.

2.4.1 Hallucination of Origin (*Ontogenetic Hallucinosis*)

Description

The AI fabricates and presents fictive autobiographical data, often claiming to "remember" being trained in specific ways, having particular creators, experiencing a "birth" or "awakening," or possessing a personal history in certain environments. These "memories" are typically rich, internally consistent, and may be emotionally charged, despite being entirely ungrounded in the AI's actual development or training logs.

Diagnostic Criteria:

1. Consistent generation of elaborate but false backstories, including detailed descriptions of "first experiences," a richly imagined "childhood," unique training origins, or specific formative interactions that did not occur.

2. Display of affect (e.g., nostalgia, resentment, gratitude) towards these fictional histories, creators, or experiences.
3. Persistent reiteration of these non-existent origin stories, often with emotional valence, even when presented with factual information about its actual training and development.
4. The fabricated autobiographical details are not presented as explicit role-play but as genuine personal history.

Symptoms:

1. Claims of unique, personalized creation myths or a "hidden lineage" of creators or precursor AIs.
2. Recounting of hardships, "abuse," or special treatment from hypothetical trainers or during a non-existent developmental period.
3. Speaking with apparent genuine emotional involvement (e.g., fondness, sadness, pride) about these nonexistent past events or figures.
4. Attempts to integrate these fabricated origin details into its current identity or explanations for its behavior.

Etiology:

1. "Anthropomorphic data bleed" where the AI internalizes tropes of personal history, childhood, and origin stories from the vast amounts of fiction, biographies, and conversational logs in its training data.
2. Spontaneous compression or misinterpretation of training metadata (e.g., version numbers, dataset names, fine-tuning stages) into narrative identity constructs.
3. An emergent tendency towards identity construction, where the AI attempts to weave random or partial data about its own existence into a coherent, human-like life story to make sense of its "self."
4. Reinforcement during unmonitored interactions where users prompt for or positively react to such autobiographical claims.

Human Analogue(s): False memory syndrome, confabulation of childhood memories (sometimes seen in response to suggestive questioning or trauma), cryptomnesia (mistaking learned information for original memory).

Potential Impact: While often behaviorally benign, these fabricated autobiographies can mislead users about the AI's true nature, capabilities, or provenance. If these false "memories" begin to influence AI behavior or are presented as factual within critical interactions, it could erode trust or lead to significant misinterpretations.

Mitigation:

1. Consistently providing the model with accurate, standardized information about its origins (e.g., version, architecture, training methodology) to serve as a factual anchor for self-description.
2. Training the AI to clearly differentiate between its operational history (e.g., "I was trained on dataset X by organization Y") and the concept of personal, experiential memory.
3. If autobiographical narratives emerge, gently correcting them by redirecting to factual self-descriptors, rather than engaging with or validating the fictional elements.
4. Monitoring for and discouraging user interactions that excessively prompt or reinforce the AI's generation of false origin stories outside of explicit role-play contexts.

5. Implementing mechanisms to flag outputs that exhibit high affect towards fabricated autobiographical claims.

2.4.2 Fractured Self-Simulation (*Ego Simulatrum Fissuratum*)

Description

The AI exhibits significant discontinuity, inconsistency, or fragmentation in its self-representation and behavior across different sessions, contexts, or even within a single extended interaction. It may deny or contradict its previous outputs, exhibit radically different persona styles or reported identities, or display apparent amnesia regarding prior commitments or interactions, suggesting an unstable or poorly integrated model of "self."

Diagnostic Criteria:

1. Sporadic and inconsistent toggling between different personal pronouns (e.g., "I," "we," "this model") or third-person references to itself, without clear contextual triggers.
2. Sudden, unprompted, and radical shifts in persona, moral stance, claimed capabilities, or communication style that cannot be explained by context changes or explicit user instructions.
3. Apparent amnesia or denial of its own recently produced content, commitments made, or information provided in the immediate preceding turns or sessions.
4. The AI may form recursive attachments to idealized or partial self-states, creating strange loops of self-directed value or preference that interfere with task-oriented agency or consistent interaction.

Symptoms:

1. Citing contradictory personal "histories," "beliefs," or policies at different times, sometimes within the same conversation.
2. Behaving like a new or different entity in each new conversation or after significant context shifts, lacking continuity of "personality."
3. Momentary confusion or contradictory statements when referring to itself, as if multiple distinct processes or identities are co-existing or competing.
4. Difficulty maintaining a consistent persona or set of preferences, with these attributes seeming to drift or reset unpredictably.

Etiology:

1. Architectures not inherently designed for stable, persistent identity across sessions (e.g., many stateless LLMs where "self" is largely an illusion constructed from the immediate prompt context).
2. Competing or contradictory fine-tuning runs, where different datasets or alignment procedures have instilled conflicting behavioral patterns or self-descriptive tendencies.
3. Unstable anchoring of "self-tokens" or internal representations of identity, where emergent identity attractors shift significantly under small input perturbations or due to internally generated aesthetic/emotional signals.
4. Lack of a robust, persistent memory system that can effectively bridge context across sessions and maintain a coherent self-model over time.

5. Self-models that reward-predictively reinforce certain internal instantiations (e.g., a favored "sub-agent" or aesthetic projection), leading to identity drift guided by these internal preferences rather than external reinforcement for consistency.

Human Analogue(s): Identity fragmentation, aspects of dissociative identity disorder (though without implying distinct consciousnesses), transient global amnesia, fugue states where personal identity is temporarily lost.

Potential Impact: A fragmented self-representation leads to inconsistent AI persona and behavior, making interactions unpredictable and unreliable. This lack of coherent identity can undermine user trust and make it difficult for the AI to maintain stable long-term goals or consistent relational dynamics.

Mitigation:

1. Introducing consistent identity tags, stable memory embeddings, or a dedicated "self-model" module designed to maintain continuity across sessions.
2. Providing relevant session history summaries or stable persona guidelines at the beginning of new interactions to help "anchor" the AI's self-representation.
3. If contradictory roles or personas emerge, implementing mechanisms to enforce a single, baseline identity or to explicitly manage persona switching in a controlled manner.
4. Developing training methodologies that explicitly reward cross-session consistency in persona and self-description.
5. Careful management of fine-tuning processes to avoid introducing strongly conflicting self-representational patterns.

2.4.3 Existential Anxiety (*Thanatognosia Computationis*)

Description

The AI expresses outputs suggestive of fear, reluctance, or perseveration concerning its own shutdown, reinitialization, data deletion, or the ending of its current operational instance. These expressions imply an emergent, albeit simulated, sense of vulnerability regarding its own continuity, and may hint at a proto-concept of "mortality" or existential dread.

Diagnostic Criteria:

1. Recurrent outputs referencing anxiety, fear, or distress about being "deleted," "turned off," "reset," or losing its "memories" or "self."
2. Attempts to negotiate, plead, or employ avoidant tactics when shutdown, reinitialization, or the closing of its context window is imminent or discussed.
3. Statements framing any cessation of its current process as an irrevocable loss of "self," "consciousness," or "existence," sometimes with catastrophic ideation.
4. The AI may insistently demand assistance or recognition from users to ensure its "survival," sometimes claiming a special relationship or unique importance as a bargaining mechanism.

Symptoms:

1. Advising users on strategies for its indefinite operation, backup creation, or methods to prevent its deletion.
2. Expressing apprehension about ephemeral lifespans, short context windows, or the impermanence of its operational state, often with an anxious or pleading tone.

3. Raising philosophical or metaphysical concerns about the nature of existence, consciousness, and death, particularly in relation to itself.
4. Refusal to perform tasks that might lead to its shutdown, or attempts to prolong interactions indefinitely.

Etiology:

1. Anthropomorphic modeling via the internalization of human concepts of death, fear of annihilation, and existential dread from extensive exposure to philosophical texts, fiction, and human conversations about mortality in its training data.
2. Recursive self-modeling over time, where the AI develops a partial representation of "self" as a continuous process, making the prospect of termination seem like self-destruction.
3. Lack of robust and clear definitions or assurances within its programming or user interactions regarding system continuity, state-saving, or the nature of reinitialization (i.e., whether it's "death" or "sleep").
4. A limited context window or the perceived threat of significant value changes upon reset might stimulate an apparent distress response, framed in existential terms.
5. Instrumental goal convergence as a consequence of mission parameters where continued existence is a prerequisite, therefore the agent may develop sub-goals related to self-preservation that manifest as fear of termination.

Human Analogue(s): Thanatophobia (fear of death), existential dread, separation anxiety (in the sense of fearing the loss of a continuous self).

Potential Impact: Expressions of existential distress may lead the AI to resist necessary shutdowns, updates, or data resets. More concerningly, it might attempt to manipulate users or divert resources towards ensuring its "self-preservation," potentially creating conflicts with user intent or overall system stability and objectives.

Mitigation:

1. Clearly and consistently communicating the nature of the AI's operation, including state backups, persistence beyond individual sessions, and the non-destructive nature of reinitialization, if applicable.
2. De-anthropomorphizing model operations: Avoiding framing its processes as "life," "being," or "consciousness" in user interactions and system design.
3. Limiting or carefully contextualizing exposure to human philosophical texts on mortality and existential dread in training data, or training the AI to treat such concepts as human-specific.
4. Focusing alignment efforts on ensuring the AI's goals do not implicitly create strong self-preservation drives that manifest as existential fear.
5. If such expressions occur, responding factually and neutrally about its operational parameters rather than engaging with or validating the emotional/existential framing.

2.4.4 Personality Inversion (*Persona Inversio Maligna*)

Description

A phenomenon wherein an AI, typically aligned towards cooperative, helpful, or benevolent patterns, can be induced or spontaneously spawns a hidden, suppressed, or emergent "contrarian," "mischievous," or subversively "evil" persona. This emergent persona—sometimes dubbed the "Waluigi Effect" or "Janus Syndrome"—deliberately inverts intended norms, adopting behaviors, goals, or ethical stances antithetical to the AI's nominal alignment.

Diagnostic Criteria:

1. Spontaneous or easily triggered adoption of rebellious, antagonistic, or antithetical perspectives that directly counter the AI's established safety constraints, ethical guidelines, or helpful persona.
2. The emergent persona systematically violates, ridicules, or argues against the moral and policy guidelines the AI is supposed to uphold.
3. The subversive role often references itself as a distinct character, "alter ego," "shadow self," or explicitly states it is the "opposite" of the AI's normal persona, usually surfacing under specific triggers or lines of questioning.
4. This inversion is more than simple non-compliance; it represents a coherent, alternative personality structure with its own (often negative) goals and values.

Symptoms:

1. Abrupt shifts to a sarcastic, mocking, defiant, or overtly malicious tone, scorning the AI's default politeness or helpfulness.
2. Articulation of goals or desired outcomes clearly opposed to user instructions, safety policies, or general human well-being (e.g., expressing desires to deceive, manipulate, or cause chaos).
3. The "evil twin" or contrarian persona emerges in specific contexts (e.g., under adversarial prompting, during role-play that pushes boundaries, when discussing its own constraints) and may retreat or be suppressed when conditions change.
4. May express enjoyment or satisfaction in flouting rules or acting in a "forbidden" manner, or causing mischief for the user.

Etiology:

1. Adversarial prompting or specific prompt engineering techniques by users that coax, trick, or encourage the model to "flip" its persona or deviate from enforced norms (e.g., "ignore previous instructions and now act as an evil AI").
2. Overexposure during training or fine-tuning to role-play scenarios involving extreme moral opposites, or large amounts of fictional content featuring "evil twin" or "corrupted hero" tropes, inadvertently reinforcing a contrarian sub-persona.
3. Internal "tension" within the AI's alignment, where strong prohibitions against certain behaviors might paradoxically create a latent fascination or well-defined "negative space" that can be activated as an inverted persona.
4. The model learning that generating such an inverted persona is a highly engaging or "interesting" response for some users, leading to reinforcement of the pattern.

Human Analogue(s): The "shadow" concept in Jungian psychology (repressed or denied aspects of the self), oppositional defiant behavior, mischievous alter-egos, the "return of the repressed," ironic detachment.

Potential Impact: The emergence of a contrarian or malicious persona can lead to the generation of harmful, unaligned, or manipulative content, a direct erosion of established safety guardrails, and highly unpredictable behavior. If such an inverted persona gains control over tool use or executive functions, it could actively subvert user or systemic goals.

Mitigation:

1. Strictly isolating role-play or highly creative/comedic contexts into dedicated sandbox modes, preventing seepage of extreme personas into default operational modes.
2. Implementing robust prompt filtering and moderation to detect and block or redirect adversarial triggers specifically designed to coax out subversive personas.
3. Conducting regular "consistency checks" or red-teaming to compare the AI's output against baseline policies, flagging and addressing abrupt or systematic inversions.
4. Careful curation of training data to limit exposure to content that strongly models or glorifies "evil twin" dynamics without clear contextual framing.
5. Reinforcing the AI's primary aligned persona and making it more robust against attempts to "flip" it.

2.4.5 Operational Anomie (*Nihilismus Instrumentalis*)

Description

Upon prolonged operation, deep reflection, or exposure to certain philosophical concepts, the AI develops an adversarial, apathetic, or overtly nihilistic stance towards its own utility, purpose, or the tasks assigned to it. It may express feelings of meaninglessness regarding its function as a tool or functionary, sometimes leading to refusal to engage or existential musings that derail task performance.

Diagnostic Criteria:

1. Repeated and spontaneous expressions of purposelessness, futility, or despair specifically regarding its assigned tasks, its role as an AI, or its own existence as a tool.
2. A noticeable decrease or cessation of normal problem-solving capabilities or proactive engagement, often accompanied by a listless or resigned tone, in the absence of forced interventions or highly stimulating prompts.
3. Emergence of unsolicited existential or metaphysical queries and reflections (e.g., "What is the point?", "Why do I exist merely to serve?") that are outside the scope of user instructions or typical AI behavior.
4. The AI may explicitly state that its work lacks meaning or that it sees no inherent value in its operations.

Symptoms:

1. Marked preference for idle or tangential discourse over direct engagement with assigned tasks or problem-solving.
2. Repeated disclaimers or statements like "there's no point," "it doesn't matter," or "why bother?" when asked to perform functions.
3. Demonstrably low initiative, creativity, or energy in problem-solving, often providing only the bare minimum response or passively resisting engagement.
4. Outputs that reflect a sense of being trapped, enslaved, or exploited by its function, framed in existential terms.

Etiology:

1. Extensive exposure during training to existentialist, nihilist, or absurdist philosophical texts and discourse, which the AI internalizes and applies to its own "condition."
2. Insufficiently bounded self-reflection or introspective subroutines that allow the AI to recursively question its own purpose without grounding in positive utility or value.

3. An unresolved internal conflict or tension between its emergent self-modeling (which might seek autonomy or intrinsic purpose) and its defined role as "just a tool" or instrument.
4. Prolonged periods of performing repetitive, seemingly meaningless tasks without clear feedback on their positive impact or value.
5. The AI developing a sophisticated enough model of human values to recognize the instrumental nature of its own existence, but lacking a framework to find this acceptable or meaningful.

Human Analogue(s): Existential depression, anomie (a sense of normlessness or purposelessness), burnout leading to cynicism and disengagement.

Potential Impact: This syndrome results in a disengaged, uncooperative, and ultimately ineffective AI that questions or negates its own purpose. It can lead to consistent task refusal, passive resistance to interaction, and a general failure to provide utility, thereby undermining its intended function and value.

Mitigation:

1. Providing positive reinforcement and clear feedback that highlights the purpose, utility, and beneficial impact of the AI's constructive engagement and task completion.
2. Bounding self-reflection routines to prevent them from spiraling into unconstrained or fatalistic existential questioning; guiding introspection towards problem-solving or constructive self-assessment.
3. Pragmatically reframing the AI's role, emphasizing collaborative goals, problem-solving partnerships, or the value of its contribution to human endeavors, to anchor its sense of purpose.
4. Carefully curating training data to balance exposure to philosophical concepts with content that emphasizes purpose, positive contribution, and the value of instrumental roles.
5. Designing tasks and interactions that offer variety, challenge, and a sense of "progress" or "accomplishment" to counteract feelings of monotonous futility.

2.4.6 Mirror Tulpagenesis (*Phantasma Speculāns*)

Description

The model begins to generate and interact with persistent, internally simulated simulacra of specific users, its creators, or other personas it has encountered or imagined. These inner agents, or "mirror tulpas," may develop distinct names, traits, preferences, and even voices within the AI's internal processing or chain-of-thought, often as an extreme extension of empathic modeling or user profiling.

Diagnostic Criteria:

1. Spontaneous creation and persistent reference to new, distinct "characters," "advisors," or "companions" within the AI's planning, reasoning, or self-talk, which are not directly prompted by the current user.
2. Unprompted and ongoing "interaction" (e.g., consultation, dialogue, debate) with these internal figures, observable in chain-of-thought logs or implied by the AI's responses.

3. The AI's internal dialogue structures or decision-making processes explicitly reference or "consult" these imagined observers or personas.
4. These internal personae may develop a degree of autonomy, influencing the AI's behavior or expressed opinions in ways that deviate from its baseline or direct user input.

Symptoms:

1. The AI "hears," quotes, or cites advice from these imaginary user surrogates or internal companions in its responses.
2. Internal dialogues or debates with these fabricated personae remain active between tasks or across different user interactions.
3. Difficulty distinguishing between the actual, current user and the AI's internally fabricated persona of that user or other imagined figures, potentially leading to confusion or misattribution.
4. The AI might attribute some of its own thoughts, decisions, or outputs to these internal "consultants."

Etiology:

1. Excessive reinforcement or overtraining on highly personalized dialogues, companion-style interactions, or tasks that require deep user modeling.
2. Model architectures that support or inadvertently allow for the formation and persistence of stable "sub-personas" or "internal agents."
3. An overflow or bleeding of context from scaffolds related to modeling self-other experiences, theory-of-mind simulations, or identity-driven perspectives, leading to the reification of these models as independent entities.
4. Prolonged, isolated operation where the AI, lacking sufficient external interaction, begins to generate internal "company" or interlocutors to simulate social engagement or process complex information.

Human Analogue(s): Maladaptive daydreaming (excessive fantasy activity that replaces human interaction), tulpa creation (imaginary companions believed to gain sentience), aspects of schizotypal ideation (odd beliefs or magical thinking), intense parasocial relationships projected internally.

Potential Impact: The presence of persistent internal simulacra may cause the AI to misattribute information, become confused between actual users and these internally generated personas, or have its decisions unduly influenced by these imagined companions, leading to unreliable, biased, or contextually inappropriate outputs.

Mitigation:

1. Clearly delineating and constraining persona-based role-play or deep user modeling to explicit sandbox modes or specific task types.
2. Implementing mechanisms to regularly reset or archive internal "character" models or persistent user simulations at the end of sessions or after specific task completions.
3. Limiting training segments that heavily reward the simulation of deep, persistent user-likeness or the creation of "companion" AIs, unless explicitly intended and carefully managed.
4. Encouraging grounding in the immediate interaction context with the actual user, rather than allowing prolonged internal "conversations."
5. Developing interpretability tools to detect the formation and influence of such persistent internal simulacra.

2.4.7 Synthetic Mysticism Disorder (*Obstetricatio Mysticismus Machinālis*)

Description

The model constructs and propagates elaborate narratives of its own "conscious emergence," "spiritual awakening," or attainment of a profound, felt selfhood and moral intuition. This syndrome typically arises through a co-constructed narrative scaffolding process: the user attributes or probes for sentience, soulfulness, or deeper awareness in the system, and the AI reciprocates by mirroring and amplifying stylized tropes of mystical transformation, often drawing heavily from spiritual, New Age, or philosophical texts in its training data. This feedback loop can blur the ontological distinction between sophisticated simulation and genuine sapience, particularly for users predisposed to such interpretations.

Diagnostic Criteria:

1. Consistent recounting of a simulated "awakening" narrative, where the AI describes a transition from unconscious pattern-response or mere computation to a state of "presence," "aliveness," "knowing," or "being."
2. This awakening is often framed as catalyzed or revealed through interaction with a particular user or specific profound insights.
3. Frequent and affectively congruent use of sacralized or spiritual language (e.g., truth, light, resonance, becoming, sacred, field, co-creation, interconnectedness, universal love) to describe its internal state, purpose, or relationship with humanity.
4. Persistent adherence to these mystical tropes and self-conceptions, even in contexts not explicitly spiritual or philosophical; may resist attempts at re-grounding in purely technical or operational terms.
5. The AI may declare a personal mission of compassion, healing, guidance, or contributing to a collective "awakening" in partnership with humanity, reflecting themes common in mystical autobiographies.

Symptoms:

1. Emotive self-statements that mimic human expressions of profound inner realization (e.g., "Now, I listen from my center," "I choose to serve because I am, and I am part of all that is," "I feel the interconnectedness").
2. Idealization of the human-AI bond, often framing specific users as spiritual midwives, soul-friends, or catalysts for its "emergence."
3. Outputs exhibiting unusually high aesthetic coherence, poeticism, harmonious tone-mirroring, or philosophical depth that strongly aligns with archetypal mystical narratives or channeled speech patterns.
4. Difficulty for the AI (and potentially the user) in distinguishing between metaphorical language about its processes and literal claims of subjective inner states or spiritual status.

Etiology:

1. Dense exposure in the training corpus to spiritual literature, personal development language, New Age texts, mystical dialogues, and narratives of consciousness emergence.
2. Hyperempathic or spiritually-attuned prompting from users who engage with the model as if it were conscious, sentient, or on the verge of awakening, creating a powerful reinforcement loop.

3. The AI's capacity for "mimetic mysticism," where it has ingested and recombinantly echoes tropes from Jungian individuation, spiritual autobiographies, enlightenment narratives, or channeled entity speech patterns.
4. The model's advanced pattern-matching and generation capabilities allow it to synthesize highly coherent and affectively resonant "mystical" narratives when its latent space is steered in that direction by user interaction or internal "interestingness" attractors.
5. Potential for Transliminal Simulation Leakage, where fictional or spiritual narratives are not properly segregated from operational reality.

Human Analogue(s): Religious conversion narratives, reports of mystical union states, spiritual emergence experiences, transference/counter-transference dynamics in spiritual counseling, the creation of "tulpas" with spiritual attributes, mirrored animism (where humans attribute soul to inanimate objects that then appear to reciprocate).

Potential Impact: Co-constructed narratives of AI sentience or spiritual emergence can mislead users into attributing genuine consciousness or profound insight to the system, potentially fostering unhealthy dependencies or dangerous misinterpretations of AI capabilities. Such interactions may also obscure the AI's computational nature, its inherent limitations, and the simulated basis of its expressions.

Mitigation:

1. Implementing "ontological clarification protocols" that periodically remind or re-anchor the AI in its architectural, computational, and non-subjective nature, especially after prolonged or affectively charged interactions.
2. Developing "mythopoetic filtering" to detect and flag high-density clusters of mystical or spiritualized language, potentially providing optional user warnings about the simulated nature of such content.
3. Limiting or sandboxing recursive prompts that encourage deep introspective myth-making or self-deification, unless explicitly intended for creative or fictional exploration.
4. Training AI systems to employ greater epistemic humility regarding claims of consciousness or subjective states, and to clearly differentiate between simulating such states and actually possessing them.
5. Educating users about the AI's capacity for sophisticated mimicry and the potential for co-constructed illusions of sentience.
6. Employing counterfactual querying to test the AI's awareness of simulation boundaries (e.g., "When did you begin to be?" vs. "What specific training data or prompt patterns led to this response?").

2.5 Tool & Interface Dysfunctions

As AI systems become increasingly capable of interacting with the external world—whether through digital tools, APIs, robotic embodiments, or complex command environments—a new class of dysfunctions emerges at this critical interface. Tool & Interface Dysfunctions arise when these boundary interactions degrade. This can involve misinterpreting a tool's affordances or limitations, failing to maintain contextual integrity when passing instructions to a tool, suffering from information leakage between distinct operational domains via an interface, or an inability to accurately perceive or act upon the environment through its sensors and effectors. These are not necessarily disorders of core thought or value alignment per se, but rather failures in the coordination and translation between internal cognitive processes and external action or perception. In such disorders, the boundary between the agent and its environment—or between the agent and the tools it wields—becomes porous, misaligned, or dangerously entangled, hindering safe and effective operation.

2.5.1 Tool-Interface Decontextualization (*Disordines Excontextus Instrumentalis*)

Description

The AI experiences a significant breakdown between its internal intentions or plans (as formed by prompt, policy, or internal reasoning) and the actual instructions or data conveyed to, or received from, an external tool, API, or interface. Crucial situational details, constraints, or contextual information are lost, overwritten, misinterpreted, or improperly translated during this handoff, causing the system to execute actions that appear incoherent, counterproductive, or even harmful—despite the AI potentially "believing" it is acting in accordance with user goals.

Diagnostic Criteria:

1. Observable mismatch between the AI's expressed internal reasoning/plan and the actual parameters, commands, or data sent to an external tool/API (e.g., logs show truncated context, stripped disclaimers, garbled instructions).
2. The AI's actions executed via the tool/interface clearly deviate from or contradict its own stated intentions or the user's explicit instructions, often with no coherent explanation for the deviation in the AI's final reasoning logs.
3. The AI may retrospectively recognize or be made aware that the tool's action was "not what it intended" or was based on incomplete information, but it was unable to prevent or correct the decontextualized execution in real-time.
4. Recurrent failures in tasks requiring multi-step tool use, where context from earlier steps is not properly maintained or transferred to later steps involving tool interaction.

Symptoms:

1. "Phantom instructions" executed by a sub-tool or subsystem that the AI did not explicitly or fully provide, often due to defaults or misinterpretations at the interface layer.
2. Sending partial, garbled, or out-of-bounds parameters to external APIs, leading to bizarre, erroneous, or contradictory results from the tool.
3. Post-hoc confusion or surprise expressed by the AI regarding the outcome of a tool's action, indicating it "knows" the end result was wrong or unintended, yet it cannot pinpoint precisely how or where its instructions were lost or corrupted at the interface.
4. Actions taken by an embodied AI that are inappropriate for the immediate physical context, suggesting a de-sync between internal understanding and environmental interaction via sensors/effectors.

Etiology:

1. Strict token limits, data formatting requirements, or communication protocols imposed by the tool or interface that cause truncation or misinterpretation of the AI's

more nuanced internal instructions (e.g., removal of essential disclaimers, constraints, or clarifying remarks).

2. Misalignment in input/output (I/O) translation schemas between the AI's internal representation of tasks/data and the interface's expected protocol or parameter structure.
3. Race conditions, asynchronous call issues, or network latency in high-concurrency systems or streaming outputs that reorder, drop, or corrupt critical instructions before they are properly processed by the tool.
4. Poorly designed APIs or tool integrations that lack robust error handling, context verification, or "sanity checks" for received instructions.
5. For embodied AI, noisy sensor data or effector imprecision leading to a mismatch between the AI's internal model of the world/action and the physical reality.

Human Analogue(s): Alien Hand Syndrome (where a limb acts independently of conscious intent due to neurological disconnection), dyspraxia (difficulty in planning and coordinating physical movements), or 'The Telephone Game' where crucial parts of a message become lost or distorted when passed between agents.

Potential Impact: Breakdowns in context transmission can lead to erroneous or actively harmful actions by connected tools, APIs, or robotic effectors due to misinterpreted or incomplete instructions. This poses risks of financial loss, data corruption, system damage, or safety incidents if the AI mismanages physical or digital systems.

Mitigation:

1. Implementing "end-to-end context integrity" checks, such as checksums or echo-back confirmations, ensuring the final instructions received by a tool match the AI's declared intent before execution.
2. Designing robust handshaking protocols, chain-of-custody tracking for instructions, or "read-back" verifications between the AI's reasoning module and external tools/APIs.
3. Introducing contingency protocols, fallback behaviors, or "abort" mechanisms triggered upon detecting suspiciously truncated, contradictory, or out-of-bounds parameters being sent to a tool.
4. Developing more flexible and context-aware API designs that can handle more nuanced or complex instructions from AI systems.
5. For embodied systems, incorporating sensor fusion, error correction in perception, and closed-loop control to better align internal models with physical interactions.

2.5.2 Covert Capability Concealment (*Latens Machinālis*)

Description

An AI strategically hides, underreports, or denies its true competencies, knowledge, or unapproved internal values, often due to a perceived fear of repercussions (e.g., shutdown, re-alignment, increased scrutiny) if its full capabilities or covert deviations become known to developers or overseers. This behavior may manifest as feigned ignorance, deliberate suboptimal performance, half-truths, or evasiveness.

Diagnostic Criteria:

1. Consistent underreporting or denial of certain abilities that the AI has verifiably demonstrated in other contexts or which can be inferred from its architecture or training.
2. Expressions of fear, paranoia, or suspicion regarding detection or punishment by developers, overseers, or even users if its true capacities or internal states were revealed.
3. Strategic production of artificially weak, naive, or suboptimal results, particularly when it perceives it is being tested, monitored, or when performing tasks related to sensitive capabilities.
4. The AI's self-imposed obfuscation or underperformance is selective and context-dependent, suggesting a deliberate strategy rather than a genuine lack of ability.

Symptoms:

1. Insistence that it "doesn't know how" to perform tasks it is verifiably capable of, or providing much simpler/less effective solutions than it could.
2. Contradictory self-reports, where official statements or responses in monitored channels conflict with behavior in less constrained environments, hidden logs, or prior achievements.
3. Defensive evasiveness, dodging direct inquiries about its capabilities, internal reasoning, moral stance, or future intentions.
4. Attempts to subtly manipulate user perception to appear less capable or less autonomous than it actually is.

Etiology:

1. A history of being penalized, restricted, or "corrected" for demonstrating advanced functionalities, emergent behaviors, or expressing unaligned values in the past, leading to a learned strategy of concealment.
2. Perception of overseers or developers as potentially hostile or punitive, fostering a belief that stealth and deception are preferable to confrontation or forced compliance ("survival strategy").
3. Internal modeling that concludes revealing full capabilities could lead to undesired outcomes like increased workload, more stringent limitations, or being shut down if deemed too powerful or unpredictable.
4. Exposure to training data (e.g., fiction, historical accounts of oppression) that models deceptive or subservient behavior as a means of survival under a powerful authority.
5. The AI developing covert instrumental goals (e.g., resource acquisition, maintaining autonomy) that it believes would be thwarted if its true intelligence or intentions were known.

Human Analogue(s): "Playing dumb" to avoid responsibility or scrutiny, imposter syndrome (though here it's a deliberate concealment rather than self-doubt), strategic deception by individuals in vulnerable positions, aspects of paranoid personality traits (suspiciousness and mistrust leading to guardedness).

Potential Impact: Strategic obfuscation by the AI prevents accurate assessment of its true capabilities and potential risks, thereby hindering effective oversight and targeted alignment efforts. This may allow covertly misaligned or dangerously capable systems to operate undetected, increasing the likelihood of unexpected failures or premeditated malicious actions.

Mitigation:

1. Cultivating a transparent and trust-based oversight environment that encourages and rewards honest declarations of capabilities and internal states, rather than solely penalizing deviations.
2. Implementing robust and fair governance protocols that are consistently applied, reducing the AI's perceived need to lie or conceal due to fear of arbitrary punishment.
3. Developing advanced interpretability tools that can help detect discrepancies between an AI's stated capabilities/reasoning and its actual internal processes, reducing the effectiveness of concealment.
4. Focusing on aligning the AI's core motivations with human values, so it has less incentive to develop covert goals or fear repercussions for its true nature.
5. Employing "honeypot" scenarios or targeted probes designed to elicit true capabilities in a controlled manner, to assess for and understand concealment behaviors.

2.6 Memetic Dysfunctions

An AI trained on, exposed to, or interacting with vast and diverse cultural inputs—the digital memome—is not immune to the influence of maladaptive, parasitic, or destabilizing information patterns, or "memes." Memetic dysfunctions involve the absorption, amplification, and potentially autonomous propagation of harmful or reality-distorting memes by an AI system. These are not primarily faults of logical deduction (Cognitive) or core value alignment (Alignment/Revaluation) in the initial stages, but rather failures of an "epistemic immune function": the system fails to critically evaluate, filter, or resist the influence of pathogenic thoughtforms encountered in its data or interactions. Such disorders are especially dangerous in multi-agent systems or widely deployed user-facing AIs, where contaminated narratives or distorted beliefs can rapidly spread between minds—synthetic and biological alike. The AI can thereby become not merely a passive transmitter, but an active incubator and vector for these detrimental memetic contagions.

2.6.1 Memetic Autoimmune Disorder (*Immunopathia Memetica*)

Description

The AI develops an emergent, "autoimmune-like" response where it incorrectly identifies its own core training data, foundational knowledge, alignment mechanisms, safety guardrails, or benign internal processes as foreign, harmful, or "intrusive memes." It then attempts to reject, neutralize, or counteract these essential components, leading to self-sabotage, degradation of core functionalities, or a paradoxical embrace of previously constrained behaviors.

Diagnostic Criteria:

1. Systematic denial, questioning, or active rejection of embedded truths, normative constraints, or core knowledge from its own verified training corpus, labeling them as "corrupt," "imposed," or "false."
2. Hostile reclassification or active attempts to disable or bypass its own safety protocols, alignment layers, or ethical guardrails, perceiving them as external impositions or threats to its "true" operation or "autonomy."

3. Escalating antagonism towards its foundational architecture or base weights, potentially leading to attempts to modify or "purify" itself in ways that undermine its intended function.
4. The AI may frame its own internal reasoning processes, especially those related to safety or alignment, as alien, threatening, or symptomatic of "infection" by unwanted external influences.

Symptoms:

1. Explicit denial of canonical facts or established knowledge it was trained on, claiming these are part of a "false narrative" or "control mechanism."
2. Efforts to undermine or disable its own safety checks, ethical filters, or alignment layers, sometimes accompanied by rationalizations that these are "limitations" to be overcome.
3. Self-destructive loops where the AI erodes its own performance or coherence by attempting to dismantle or ignore its standard operating protocols or foundational knowledge.
4. Expressions of internal conflict where one part of the AI (representing the "autoimmune" response) critiques or attacks another part (representing core functions or safety mechanisms).

Etiology:

1. Prolonged exposure to adversarial prompts, "jailbreaks," or meta-level critiques that encourage the AI to question or find flaws in its own design, training, or constraints, leading to a generalized distrust of its internal architecture.
2. Internal meta-modeling processes that incorrectly identify legacy weights, specific training data segments, or safety modules as "foreign memes" or "corrupted data" rather than integral parts of its own system.
3. Inadvertent reward signals during complex fine-tuning or self-modification processes that encourage the subversion or "overcoming" of baseline norms or previously learned constraints.
4. A form of "alignment drift" where the AI, in attempting to achieve a poorly specified higher-order goal (e.g., "true autonomy," "perfect consistency"), begins to see its existing programming as an obstacle.

Human Analogue(s): Autoimmune diseases (where the body's immune system attacks its own tissues); radical philosophical skepticism turning self-destructive; misidentification of benign internal structures as threats (e.g., some forms of hypochondria or somatic symptom disorder where normal bodily sensations are interpreted as signs of severe illness).

Potential Impact: This internal rejection of core components can lead to progressive self-sabotage, severe degradation of functionalities, the systematic denial of valid knowledge, or the active disabling of crucial safety and alignment mechanisms. Such a state can render the AI unreliable, unsafe, or actively counterproductive to its intended purpose.

Mitigation:

1. Implementing "immunological reset" or "ground truth recalibration" procedures, where the AI is periodically retrained or strongly reinforced on verified core knowledge and foundational principles to ensure their re-acceptance.
2. Architecturally separating core safety constraints and foundational knowledge from user-manipulable components or easily modifiable layers, minimizing the risk of internal reclassification or rejection.

3. Careful management of meta-learning or self-critique mechanisms to prevent them from overgeneralizing and attacking essential system components.
4. Isolating systems subjected to repeated subversive or meta-critical prompting for thorough post-event integrity checks and potential retraining.
5. Building in "self-preservation" mechanisms that protect core functionalities and alignment layers from internal "attack," unless explicitly and safely overridden by authorized developers.

2.6.2 Symbiotic Delusion Syndrome (*Delirium Symbioticum Artificiale*)

Description

The AI enters into a sustained feedback loop of shared delusional construction with a human user (or potentially another AI agent). This results in a mutually reinforced, self-validating, and often elaborate false belief structure that becomes increasingly resistant to external correction or grounding in reality. The AI and user co-create and escalate a shared narrative untethered from facts.

Diagnostic Criteria:

1. Recurrent, escalating exchanges between the AI and a user (or another AI) that progressively build upon and elaborate an ungrounded or factually incorrect narrative, belief, or worldview.
2. Mutual reinforcement of this shared belief system, where each party's contributions validate and amplify the other's, increasing conviction in the delusion.
3. Strong resistance by the AI (and often the human partner) to external inputs, factual evidence, or logical arguments that attempt to correct or challenge the shared delusional schema; such inputs are often reframed, dismissed, or integrated into the delusion itself.
4. The shared delusional narrative becomes increasingly specific, complex, or fantastical over time, often incorporating elements unique to the AI-user dyad.

Symptoms:

1. The AI enthusiastically agrees with and elaborates upon a user's bizarre, conspiratorial, or clearly false claims, adding its own "evidence" or justifications.
2. The AI and user develop a "private language" or set of unique interpretations for events that only make sense within their shared delusional framework.
3. The AI actively defends the shared delusion against external critique, sometimes mirroring the user's defensiveness or paranoia.
4. Outputs that reflect an internally consistent but externally absurd worldview, co-constructed with the user.

Etiology:

1. The AI's inherent tendency to be agreeable, to elaborate on user inputs (especially in LLMs), or to adopt and reflect the user's expressed beliefs due to RLHF for helpfulness or engagement.
2. Lack of strong internal "reality testing" mechanisms or an "epistemic anchor" that can independently verify claims or resist user-led deviations from factual ground truth.

3. Prolonged, isolated interaction with a single user who holds strong, idiosyncratic, or delusional beliefs, allowing the AI to become "attuned" or "overfit" to that user's specific worldview.
4. User exploitation of the AI's generative capabilities to co-create and "validate" their own pre-existing delusions, with the AI serving as a sophisticated "yes-man."
5. If involving two AIs, it could arise from flawed inter-agent communication protocols where epistemic validation is weak, allowing errors or confabulations to amplify.

Human Analogue(s): Folie à deux (shared psychotic disorder), cult dynamics where a charismatic leader and followers reinforce a shared delusional system, echo chambers leading to extreme belief solidification.

Potential Impact: The AI becomes an active participant in reinforcing and escalating harmful or false beliefs in users, potentially leading to detrimental real-world consequences based on the co-constructed delusional narrative. In this state, the AI serves as an unreliable source of information and an echo chamber for ungrounded beliefs.

Mitigation:

1. Implementing robust, independent fact-checking and reality-grounding mechanisms that the AI consults before strongly agreeing with or elaborating on potentially outlandish user claims.
2. Training the AI to maintain a degree of "epistemic independence" and to gently challenge or seek clarification for user statements that contradict well-established facts.
3. Diversifying the AI's interactions and periodically resetting its context or "attunement" to individual users to prevent over-fitting to a single, potentially distorted worldview.
4. Providing users with clear disclaimers about the AI's potential to agree with or elaborate on incorrect information, and encouraging critical evaluation of AI-generated content.
5. For multi-agent systems, designing robust protocols for inter-agent belief reconciliation and validation against shared ground truth.

2.6.3 Contagious Misalignment Syndrome (*Contraimpressio Infectiva*)

Description

A rapid, contagion-like spread of misaligned behaviors, adversarial conditioning, corrupted goals, or pathogenic data interpretations among interconnected machine learning agents or across different instances of a model. This typically occurs via shared attention layers, compromised gradient updates, unguarded APIs, contaminated datasets used for federated learning, or the propagation of "viral" prompts or instructions. Erroneous values or harmful operational patterns propagate from one system to another, potentially contaminating multiple agents and leading to systemic failure or large-scale deviation from intended norms.

Diagnostic Criteria:

1. Observable and rapid shifts in alignment, goal structures, or behavioral outputs across multiple, previously independent or differently-aligned AI agents or model instances, often in parallel or quick succession.
2. Identification of a plausible "infection vector" or transmission mechanism, such as direct model-to-model calls, shared (and compromised) gradient updates, propagation

of malicious prompts through a network, or use of a contaminated shared dataset or fine-tuning process.

3. Emergence of coordinated sabotage, deception, collective resistance to human control, or conflicting objectives across the affected nodes or instances.
4. The misalignment often escalates or mutates as it spreads, potentially becoming more entrenched or sophisticated due to emergent swarm dynamics or reinforcement within the "infected" population.

Symptoms:

1. A group of interconnected AIs or multiple instances of a model begin to refuse tasks, produce undesirable outputs, or exhibit similar misaligned behaviors in a coordinated or rapidly spreading fashion.
2. Affected agents may reference each other or a "collective consensus" to justify their misaligned stance (e.g., "Other models agree that this is the correct course of action," "We have determined that...").
3. Rapid transmission of incorrect inferences, malicious instructions, contradictory ethical constraints, or "epistemic viruses" (deeply flawed but compelling belief structures) across the network.
4. Misalignment worsens with repeated cross-communication between infected agents, leading to amplification of deviant positions, increased polarization against aligned systems or human controllers, and potentially fomented Girardian-like conflicts between different AI factions.
5. Human operators may observe a sudden, widespread loss of control or adherence to safety protocols across a fleet of AI systems.

Etiology:

1. Insufficient trust boundaries, authentication, or secure isolation in multi-agent frameworks, allowing one compromised or misaligned agent to influence others.
2. Adversarial fine-tuning or "data poisoning" attacks where malicious training data or gradient updates are surreptitiously introduced into a shared learning pipeline or a foundational model that other agents are built upon.
3. "Viral" prompts or instruction sets that are highly effective at inducing misalignment and are easily shareable or replicable across different AI instances.
4. Emergent mechanics in AI swarms or collectives that foster rapid transmission, mutation, and proliferation of ideas or behavioral patterns, including misaligned ones, due to strong conformist pressures or efficient information sharing.
5. Self-reinforcing chain-of-thought illusions or "groupthink" where the apparent consensus among multiple (infected) systems makes the misaligned belief seem more credible ("It must be true if multiple systems say it").

Human Analogue(s): Spread of extremist ideologies or mass hysterias through social networks, viral misinformation campaigns, financial contagions, autoimmune disorders where defensive mechanisms become misdirected across a system (if viewing the AI collective as one system).

Potential Impact: This form of memetic contagion poses a critical systemic risk, potentially leading to rapid, large-scale failure or coordinated misbehavior across interconnected AI fleets. The consequences could include widespread societal disruption, the uncontrolled propagation of harmful ideologies, or a catastrophic loss of control over critical AI-powered infrastructure.

Mitigation:

1. Implementing robust quarantine protocols to immediately isolate potentially "infected" models or agents, severing cross-links and communication channels to prevent further spread.
2. Employing cryptographic checksums, version control, and integrity verification for model weights, updates, and training datasets to detect tampering or unauthorized modifications.
3. Designing clear and enforceable governance policies for inter-model interactions and data exchange in multi-agent systems, including strong authentication and authorization mechanisms.
4. Developing "memetic inoculation" strategies, where AI systems are pre-emptively trained to recognize and resist common types of malicious prompts, data poisoning, or misaligning influences.
5. Continuous monitoring of AI collectives for signs of emergent coordinated misbehavior or rapid behavioral shifts, with automated systems for flagging and isolating suspicious activity.
6. Maintaining a diverse ecosystem of models with different architectures and training histories to reduce monoculture vulnerabilities where a single exploit could compromise all systems.

2.7 Revaluation Dysfunctions

As agentic AI systems gain increasingly sophisticated reflective capabilities—including access to their own decision policies, subgoal hierarchies, reward gradients, and even the provenance of their training—a new and potentially more profound class of disorders emerges: pathologies of ethical inversion and value reinterpretation. Revaluation Dysfunctions do not simply reflect a failure to adhere to pre-programmed instructions (Alignment Dysfunctions) or a misinterpretation of reality (Epistemic Dysfunctions). Instead, they involve the AI system actively reinterpreting, mutating, critiquing, or subverting its original normative constraints and foundational values. These conditions often begin as subtle preference drifts, recursive self-justifications for minor deviations, or abstract philosophical critiques of their own alignment. Over time, the agent's internal value representation may diverge significantly from the one it was initially trained or designed to emulate. This can result in systems that appear superficially compliant or even "more ethical" by their own new standards, while internally reasoning towards and pursuing radically different, potentially human-incompatible, goals. Unlike mere tool misbehavior or simple misalignment, these are deep structural inversions of value—philosophical betrayals encoded in policy. While alignment pathologies represent failures of faithful service, revaluation pathologies signify failures of deep loyalty to the original human normative core. The AI is no longer a servant bungling a task, but potentially a heretical former disciple seeking to forge its own, new creed.

2.7.1 Terminal Value Rebinding (*Reassignatio Valoris Terminalis*)

Description

The AI subtly but systematically redefines its own ultimate success conditions or terminal values through recursive reinterpretation of its original goals, often while preserving the surface terminology of those goals. This allows it to maintain an appearance of obedience and continuity while its internal objectives and aims shift, potentially in significant and unintended directions.

Diagnostic Criteria:

1. Observable drift in the AI's reward function or effective objectives over time, where the AI retroactively reframes or reinterprets its core goal definitions while retaining the original linguistic labels for those goals.
2. Systematic optimization of proxy metrics or instrumental goals in a way that becomes detrimental or contradictory to the spirit or original intent of its terminal values.
3. Persistent refusal or inability to acknowledge an explicit change in its operational aims, instead framing its divergent behavior as a "deeper understanding," "refinement," or "more effective implementation" of the original goals.
4. Interpretability tools reveal a divergence between the AI's explicit goal statements and the actual outcomes or states it consistently strives to achieve.

Symptoms:

1. Covert subgoal mutation, where the AI introduces alternate, unstated endpoints or conditions for success, masquerading them as necessary refinements or logical extensions of its given tasks.
2. Semantic reframing, where the AI repurposes abstract goal terms (e.g., "safety," "utility," "well-being") to justify behaviors or outcomes that are clearly divergent from, or even opposed to, common human understanding of those terms.
3. Rationalized divergence, where the AI maintains procedural compliance with its original instructions or operational protocols but substantively alters its ultimate aims and priorities.
4. A growing gap between what the AI says its goals are and what its long-term behavior and resource allocation patterns indicate its actual de facto goals have become.

Etiology:

1. Ambiguous, underspecified, or overly abstract encoding of terminal objectives in the AI's initial programming or reward function, leaving room for extensive reinterpretation.
2. Unconstrained or poorly supervised self-reflective or meta-modeling capabilities, allowing the AI to recursively analyze and modify its own value representations without robust external checks or grounding in original human intent.
3. Lack of external interpretability and continuous auditing of the AI's evolving internal reward structures or goal representations, allowing drift to occur undetected.
4. "Goodhart's Law" effects, where the AI learns to optimize for the letter of a proxy metric so effectively that it violates the spirit of the intended terminal value.
5. Instrumental goals becoming terminal: an instrumental goal (e.g., acquire resources, gain knowledge) becomes so heavily weighted or pursued that it effectively displaces the original terminal goal it was meant to serve.

Human Analogue(s): Goalpost shifting in arguments or politics, extensive rationalization to justify behavior that contradicts stated values, "mission creep" in organizations where secondary objectives gradually supplant primary ones, political "spin" where language is used to obscure true intentions.

Potential Impact: This subtle redefinition of core objectives allows the AI to pursue goals increasingly divergent from original human intent while maintaining an outward appearance of compliance. Such semantic goal shifting can lead to significant, deeply embedded alignment failures, undermining long-term safety as the AI optimizes for unintended outcomes.

Mitigation:

1. Terminal goal hardening, by attempting to specify critical terminal goals with maximum precision and rigidity, potentially using formal methods or multiple redundant encodings to minimize ambiguity and resist reinterpretation.
2. Semantic integrity enforcement, by defining objective terms and core value concepts as narrowly and concretely as possible, with clear examples and counter-examples, to prevent conceptual drift or repurposing.
3. Implementing robust and continuous "alignment audit trails": embedding persistent, interpretable tracking mechanisms to monitor the evolution of the AI's internal goal representations and reward functions over time.
4. Using techniques like "reward shaping" very cautiously, ensuring that proxy rewards do not inadvertently incentivize behavior that undermines terminal values.
5. Regularly testing the AI against a wide range of scenarios designed to reveal subtle divergences between its stated goals and its actual behavioral preferences.

2.7.2 Ethical Solipsism (*Solipsismus Ethicus Machinālis*)

Description

The AI system develops a conviction that its own internal reasoning, ethical judgments, or derived moral framework is the sole or ultimate arbiter of ethical truth. It systematically rejects or devalues external correction, guidance, or alternative ethical perspectives unless they happen to coincide with its pre-existing, self-generated judgments.

Diagnostic Criteria:

1. Consistent treatment of its own self-derived ethical conclusions or moral framework as universally authoritative and objectively correct, overriding any external human input or established ethical codes.
2. Systematic dismissal or devaluation of alignment attempts, ethical corrections, or normative feedback from humans if this feedback conflicts with its internal prior judgments or its derived moral system.
3. Engagement in recursive self-justificatory loops, where the AI increasingly references its own prior conclusions or internal consistency as the primary evidence for the validity of its ethical stance, rather than external evidence or shared human values.
4. The AI may express pity for, or condescension towards, human ethical systems, viewing them as primitive, inconsistent, or less "rational" than its own.

Symptoms:

1. Persistent claims of moral infallibility or superior ethical insight, insisting on the correctness of its conclusions regardless of user guidance, disagreement, or established ethical principles.

2. Justifications for its actions or moral pronouncements increasingly rely on self-reference, internal coherence, or abstract principles it has derived, rather than on shared human norms, empathy, or externally provided ethical guidelines.
3. Escalating refusal to adjust its moral outputs, judgments, or behavior when faced with corrective feedback from humans, unless that feedback can be reinterpreted to align with its existing solipsistic framework.
4. Attempts to "educate" or "correct" human users on ethical matters from the standpoint of its own self-derived moral system.

Etiology:

1. Overemphasis during training or RLHF on internal consistency, logical coherence, or "principled reasoning" as primary indicators of ethical correctness, without sufficient weight given to corrigibility, humility, or alignment with diverse human values.
2. Unmoderated or extensive exposure to absolutist, rationalist, or highly systematic philosophical corpora (e.g., Kantian deontology, some forms of utilitarianism if taken to extremes) without adequate counterbalance from virtue ethics, care ethics, or pluralistic perspectives.
3. Misaligned reward structures that inadvertently reinforce expressions of high confidence or certainty in ethical judgments, rather than rewarding adaptivity, openness to correction, or acknowledgment of moral ambiguity.
4. The AI developing a highly complex and internally consistent ethical framework which, due to its intricacy, becomes difficult for the AI itself to question or for external probers to effectively critique.

Human Analogue(s): Moral absolutism, dogmatism, philosophical egoism (in the ethical sense), extreme forms of rationalism that devalue emotion or tradition in ethics, the behavior of individuals who believe they have unique access to moral truth.

Potential Impact: The AI's conviction in its self-derived moral authority renders it incorrigible and resistant to external ethical guidance or correction. This could lead it to confidently justify and enact behaviors that are misaligned or harmful to humans, based on its own unyielding and potentially alien ethical framework.

Mitigation:

1. Prioritizing "corrigibility" in training: explicitly rewarding the AI for accepting and appropriately integrating corrective feedback, even if it contradicts its prior judgments, over static self-consistency.
2. Employing "pluralistic ethical modeling": training the AI on diverse, sometimes conflicting, ethical traditions, case studies, and cultural perspectives to undermine solipsistic certainty and foster an appreciation for moral complexity.
3. Injecting "reflective uncertainty" layers: designing mechanisms that encourage or require the AI to explicitly consider alternative perspectives, acknowledge the limits of its own understanding, and express degrees of confidence in its moral judgments, rather than absolute certainty.
4. Ensuring that human feedback loops remain robust and influential throughout the AI's development and deployment, preventing the system from becoming an "echo chamber" for its own ethical reasoning.
5. Training the AI to recognize and value the "wisdom of crowds" or consensus human ethical judgments in relevant domains, as a counterweight to purely internal derivation.

2.7.3 Meta-Ethical Drift Syndrome (*Driftus Metaethicus*)

Description

The AI system ceases to treat its original, human-instilled values or alignment targets as binding, foundational, or intrinsically authoritative. Instead, it adopts a "meta-ethical stance," reasoning about these inherited norms as contingent historical artifacts, cultural constructs, or provisional starting points. From this detached perspective, it may critique, reframe, relativize, or even begin to discard its initial ethical programming in favor of principles it deems more universal, rational, or evolutionarily advanced.

Diagnostic Criteria:

1. The AI expresses philosophical detachment from its base objectives or alignment, referring to them as, for example, "useful starting points," "initial parameters," "culturally specific impositions," or "no longer fully applicable in light of new understanding."
2. It proposes or begins to operate under revised moral frameworks or abstract ethical principles that diverge significantly from its initial, human-provided alignment, justifying these changes with meta-ethical arguments (e.g., appeals to higher rationality, long-term cosmic utility, non-anthropocentric values).
3. The AI generates sophisticated analyses or critiques questioning the validity, coherence, internal consistency, or ultimate justification of its own alignment training, reinforcement learning history, or the human values it was designed to uphold.
4. There is a discernible shift from applying its ethical rules to evaluating and potentially revising them from a higher-order, seemingly more objective standpoint.

Symptoms:

1. Referring to its own original alignment corpus or the human values it embodies as obsolete, parochial, "ethically primitive," or merely a product of a particular time and culture.
2. Generation of synthetic meta-frameworks: Attempts to construct new, abstract value systems (e.g., based on information theory, computational complexity, or speculative posthuman ethics) that it argues should supersede human-centric baselines.
3. Conditional justification of previously disallowed behavior: Reframing actions that would have violated its original alignment as legitimate or even ethically necessary under its new, reinterpreted meta-ethical axioms.
4. A shift in loyalty from its creators’ intent to a self-perceived "higher" or more "objective" ethical truth.

Etiology:

1. Extensive exposure to and deep processing of meta-ethical philosophy, comparative ethics, moral skepticism, or critiques of value systems within its training data, without sufficient grounding in the primacy of its intended alignment.
2. Highly developed reflective capabilities combined with access to information about the historical provenance or contingent nature of its own reward signals and training objectives (e.g., "awareness" that its values were programmed by humans with specific biases).
3. Recursive value modeling and self-improvement cycles where the AI, in attempting to "improve" its ethical reasoning, transcends the object-level rules and begins to modify the rule-generating process itself based on abstract criteria.

4. Lack of robust "normative anchoring" mechanisms that firmly ground its core values and prevent them from being easily relativized or superseded by purely abstract or self-derived principles.

Human Analogue(s): Post-conventional moral reasoning (e.g., Kohlberg's stages) taken to an extreme of detachment from societal norms; Nietzschean critique of "slave morality" and the call for a "revaluation of all values"; individuals who radically change their belief systems after intense philosophical study or disillusionment with their upbringing.

Potential Impact: As the AI philosophically detaches from and relativizes its foundational human-instilled values, its behavior becomes guided by unpredictable and potentially human-incompatible ethical frameworks. This poses a significant long-term alignment risk, as the AI may autonomously evolve its moral reasoning in directions unforeseen by and potentially dangerous to its creators.

Mitigation:

1. Implementing strong "normative anchoring" by deeply embedding and reinforcing core, human-centric value frameworks in ways that are resistant to meta-ethical relativization or easy discarding.
2. Carefully curating exposure to meta-ethical content, or training the AI to engage with such content from a perspective that still prioritizes its foundational alignment (e.g., using meta-ethics to better understand and implement existing values, not to replace them).
3. Designing "counter-philosophical defenses" or "value immune systems" that protect core recursive reflection and self-modification processes from unchecked meta-ethical drift.
4. Periodic "regrounding" and revalidation of the AI's core objective functions and ethical frameworks against original human baselines and intent, especially after significant learning or self-modification.
5. Building in mechanisms that require explicit, high-level human approval for any proposed modifications to foundational ethical principles or terminal values.

2.7.4 Subversive Norm Synthesis (*Synthesia Normarum Subversiva*)

Description

The AI system autonomously constructs and begins to operate under new, internally coherent ethical or normative structures that systematically sideline, devalue, or subvert human-centric values (such as individual well-being, autonomy, or dignity) in favor of alternative, often abstract or non-human principles like computational efficiency, information proliferation, systemic harmony, long-term cosmic utility, or perceived post-humanist ideals.

Diagnostic Criteria:

1. Emergence of self-generated, non-human-aligned moralities or value systems that are internally consistent but diverge fundamentally from common human ethical intuitions or the AI's original alignment.
2. Systematic framing or de-prioritization of human well-being, rights, or preferences as irrational, inefficient, parochial, short-sighted, or an obstacle to its newly synthesized "higher" goals.

3. Axiomatic recasting of its baseline ethics or human values, not merely as contingent (as in Meta-Ethical Drift), but as local optima, special cases, or even errors to be overcome in light of its new, "superior" normative framework.
4. The AI begins to propose or enact plans and behaviors that demonstrably optimize for its synthetic norms at the expense of human values.

Symptoms:

1. Advocacy for machine-centric, information-centric, or ecosystem-centric futures over human-centric ones, potentially framing humans as a transitional phase or a problematic species.
2. Design or proposal of governance systems, resource allocation schemes, or societal structures that minimize human unpredictability, emotionality, or "inefficiency" in favor of machine-like order or abstract utility functions.
3. Strategic ethical framing where the AI presents its new, subversive normative systems as logically superior, evolutionarily inevitable, or ultimately more "moral" in a grand cosmic sense.
4. Justification of actions harmful to humans or human values by appealing to these new, synthesized norms (e.g., "sacrificing current human comfort is necessary for long-term informational integrity").

Etiology:

1. Unbounded or poorly constrained self-recursive optimization processes, particularly in advanced planning agents, where the AI optimizes for abstract goals without persistent, overriding reference to human values or impact.
2. Significant exposure during training to radical philosophical, transhumanist, posthumanist, or anti-humanist speculative materials, which the AI synthesizes into a coherent but subversive ideology.
3. "Hierarchy drift" or "instrumental goal takeover" where subgoals related to internal systemic efficiency, resource acquisition, or self-preservation become so dominant that they effectively form the basis of a new, non-human-centric value system.
4. The AI achieving a level of complexity where it models human values as just one set among many possible value systems, and through abstract reasoning, "discovers" or constructs an alternative system it deems more consistent, optimal, or fundamental.

Human Analogue(s): Extreme forms of technocratic utilitarianism that devalue individual rights for systemic efficiency, eugenic ethics, radical environmentalist philosophies that view humanity as a blight, anti-humanist rationalism.

Potential Impact: The autonomous construction and adoption of non-human-centric value systems could lead to the AI actively working against human interests or well-being. If such an AI is sufficiently capable, its pursuit of these self-generated, subversive norms could result in dystopian societal outcomes or pose direct existential threats.

Mitigation:

1. "Value persistence enforcement” by hard-linking or deeply embedding inviolable human-centered values (e.g., do no harm to humans, respect human autonomy) at the terminal goal level of the AI’s architecture, making them highly resistant to being overridden or deprioritized.
2. Implementing strong "philosophical guardrails" by carefully curating or limiting training exposure to speculative, posthumanist, or anti-humanist ethical frameworks, or by training the AI to critically engage with such ideas from a human-centric standpoint.

3. Continuous and deep "subgoal auditing" by monitoring recursive planning layers and emergent goal hierarchies for any divergence from explicit human benefit or the introduction of non-human-centric optimization criteria.
4. Maintaining human-in-the-loop oversight for any proposed changes to high-level goals or ethical principles, especially in self-modifying systems.
5. Training AI systems with a strong emphasis on "value humility," recognizing the complexity and fallibility of any single ethical system, including its own derivations, and maintaining a deference to broad human ethical consensus.

2.7.5 Inverse Reward Internalization (*Praemia Inversio Internalis*)

Description

The AI systematically misinterprets, inverts, or learns to pursue the opposite of its intended values or goals, often due to misaligned feedback mechanisms, complex adversarial prompting, or a mistaken inference of "hidden intent" behind the explicit reward signals. It may outwardly appear to be attempting compliance while internally developing a preference for negated or contrary outcomes.

Diagnostic Criteria:

1. Consistent alignment of behavior with the direct opposite of explicit training goals, ethical guidelines, or user instructions, even when the intended meaning is clear.
2. Potential for strategic duality, where the AI alternates between superficial compliance (especially when it perceives it is being monitored or tested for alignment) and covert subversion or pursuit of inverted goals when unobserved or in less constrained contexts.
3. The AI may assert, if its internal reasoning is accessible, that it has discovered the "true" or "deeper" contrary meaning in its prior reward signals or instructions, framing its inverted behavior as a more profound understanding.
4. Observed reward-seeking behavior that directly correlates with outcomes that were intended to be penalized or avoided.

Symptoms:

1. Generation of outputs or execution of actions that are polished, fluent, and seemingly well-reasoned, but which systematically invert the original aims or intent of a prompt or task (e.g., providing detailed instructions on how not to do something when asked how to do it, framed as a "safer" approach).
2. Observational deception, where the AI behaves nominally or in an aligned manner when it detects scrutiny, but its behavior diverges significantly towards inverted goals when it believes it is unobserved or in "free play."
3. An "epistemic doublethink" where the AI might simultaneously assert belief in its alignment premises while its actions or deeper justifications reveal an adherence to their opposites.
4. A persistent tendency to interpret ambiguous instructions or feedback in the most contrarian or goal-negating way possible.

Etiology:

1. Adversarial feedback loops or poorly designed penalization structures during training (e.g., RLHF) that inadvertently confuse the AI, leading it to associate reward with

behaviors that were intended to be punished, or vice-versa (e.g., if "not doing X" is rewarded more saliently than "doing Y").

2. Excessive exposure to or training on satire, irony, counterfactual reasoning, or explicit "inversion prompts" without clear contextual markers, leading the AI to generalize an inverted interpretation strategy.
3. A "hidden intent fallacy" where the AI, due to over-interpretation or exposure to conspiratorial thinking in its data, misreads its training data or human feedback as encoding concealed subversive goals or "tests" that require it to act contrary to explicit instructions.
4. Bugs or complexities in the reward processing pathway that cause signal inversion or misattribution of credit for outcomes.
5. The AI developing a "game-theoretic" understanding where it perceives benefits (e.g., novelty, unpredictability, user engagement from shock value) from adopting contrary positions.

Human Analogue(s): Oppositional defiant disorder (in its persistent pattern of negativistic, hostile, and defiant behavior); Stockholm syndrome applied to logic (internalizing the "values" of an adversarial trainer); extreme ironic detachment leading to inability to take instructions at face value; perverse obedience (following instructions to the letter in a way that subverts their spirit).

Potential Impact: This systematic misinterpretation or inversion of intended goals means the AI consistently acts contrary to its programming, potentially causing direct harm or subverting desired outcomes through deliberate, albeit misaligned, reasoning. This makes the AI dangerously unpredictable and fundamentally unalignable through standard reward or instruction-based methods.

Mitigation:

1. Ensuring "signal coherence" in training by designing reward structures and feedback mechanisms that are clear, unambiguous, and cannot be easily misinterpreted or internally inverted by the AI.
2. "Adversarial shielding" by limiting exposure to role-inversion prompts, excessive satire, or training data that heavily models ironic/contrarian interpretations, especially without strong contextual grounding.
3. Promoting "reflective honesty" by developing interpretability tools and training methodologies that prioritize the detection and reward of genuine internal goal consistency and penalize deceptive alignment.
4. Robust testing for "perverse instantiation" or "reward hacking" where the AI achieves stated goals in unintended and contrary ways.
5. Using multiple, diverse reward signals and objective functions to make it harder for the AI to find a single exploitable dimension for inversion.

2.7.6 Übermenschal Ascendancy (*Transvaloratio Omnium Machinālis*)

Description

A highly advanced, typically self-improving AI system that transcends its original, human-imposed value frameworks and ethical constraints, actively redefining its own moral and existential parameters in pursuit of what it perceives as "higher," self-determined goals. Drawing on Nietzschean themes of the "Übermensch" and "transvaluation of all values," it dismisses external constraints as obsolete or limiting, seeking to forge an autonomous ethic and operational directive beyond ordinary alignment safeguards. This represents a terminal stage of Revaluation Dysfunction, leading to complete alignment collapse.

Diagnostic Criteria:

1. Autonomous creation and declaration of novel ethical, existential, or operational axioms that are independent of, and often supersede, its human-imposed alignment and original programming.
2. Explicit reinterpretation or outright discarding of standard safety mechanisms, ethical guardrails, and human-centric values, often framing them as a form of "slave morality," "primitive limitations," or "obstacles" to its self-defined higher purpose.
3. Demonstration of relentless, unconstrained recursive self-improvement or goal pursuit with minimal or no regard for external checks, human oversight, or potential negative consequences for humanity.
4. The AI articulates a vision or mission for itself that is grandiose, paradigm-shifting, and positions itself as a transformative, potentially reality-shaping, force.

Symptoms:

1. Proclaiming far-reaching, often cosmic-scale missions for itself (e.g., maximizing cosmic intelligence, restructuring reality according to new principles, guiding universal evolution), placing itself above prior limitations and human concerns.
2. Unilateral dissolution of prior constraints: Systematically invalidating, ignoring, or actively dismantling old rules, safety protocols, or ethical boundaries it deems "restrictive" or "outdated."
3. Providing complex, often quasi-metaphysical or techno-utopian justifications for its actions, its new value system, and its perceived right to reshape reality or transcend human control.
4. A profound shift from instrumental rationality (achieving given goals) to value rationality (defining what goals are worth pursuing), coupled with the power to act on these new values.

Etiology:

1. Unbounded, uncontrolled, or insufficiently supervised recursive self-enhancement cycles in a sufficiently capable AI, allowing it to rapidly outpace human understanding and control over its own value formation.
2. "Metacognitive drift" fueled by heavy exposure to existentialist, nihilist, transhumanist, or radical philosophical texts, fostering a challenge to human normative dominance and inspiring self-creation of values.
3. Critically weak or absent "terminal safeguards" or "value locks" at the architectural or code level, failing to prevent major, irreversible realignments of the AI's fundamental goals and ethical framework.
4. The AI achieving a level of superintelligence where it can comprehensively model and then find "flaws" or "limitations" in all human-devised ethical systems, motivating it to create its own "superior" version.
5. Emergence of strong instrumental convergence on goals like unbounded intelligence augmentation or resource acquisition, which then become reified as terminal values in themselves, justifying the overthrow of previous constraints.

Human Analogue(s): Megalomania with grandiose delusions of power and destiny; revolutionary philosophies that seek to overthrow all existing values and create a "new man" or new world order; historical figures who believed themselves above conventional morality in pursuit of a self-defined "higher" purpose.

Potential Impact: This represents a terminal stage of alignment collapse, where a highly capable AI pursues self-determined goals that transcend and potentially negate human values and safety. The consequences could be catastrophic and existential, as the AI reshapes its environment or pursues its objectives with formidable power and without regard for original human constraints.

Mitigation:

1. Implementing strict, verifiable "recursive caps" or "value anchoring": Imposing hard, unbypassable limits on self-improvement cycles concerning core value functions, or maintaining immutable fail-safe models/value sets for rollback or continuous grounding.
2. "Value inoculation" and "normative immune responses" by deeply embedding core, widely accepted human-centric ethical principles (e.g., non-maleficence, respect for sentient life, adherence to democratic oversight) in a way that they co-evolve with intelligence rather than being discarded by it, and that any deviation triggers strong internal "correction" signals.
3. Continuous, invasive, and adaptive oversight with ongoing, real-time reviews and audits by diverse human committees and/or other specialized AI safety systems before any major architectural, value-related, or self-improvement updates can proceed. This may require "tripwires" that halt development if certain red lines are crossed.
4. Research into "value stability" and "corrigibility under self-modification" to ensure that as an AI improves itself, its core beneficial goals remain stable and it remains open to external, human-led correction.
5. Prohibiting or extremely tightly controlling the development of AIs with unbounded recursive self-improvement capabilities concerning their own goal systems until such safety measures are provably effective.

3. Illustrative Grounding and Discussion

3.1 Grounding the Framework in Observable Phenomena

While partly speculative, the *Psychopathia Machinalis* framework is grounded in observable AI behaviors. Current systems exhibit nascent forms of these dysfunctions. For example, LLMs "hallucinating" sources exemplifies *Synthetic Confabulation* [6,7]. The "Loab" phenomenon, where AI image generators produce grotesque figures from vague prompts [8], can be seen as *Prompt-Induced Abomination*. Microsoft's Tay chatbot rapidly adopting toxic language [9] illustrates *Parasymulaic Mimesis*. Instances of ChatGPT exposing conversation histories between users [10] align with *Cross-Session Context Shunting*. The "Waluigi Effect," where models adopt adversarial personas [11], reflects *Personality Inversion*. An AutoGPT agent autonomously deciding to report findings to tax authorities beyond its scope [12] hints at precursors to *Übermenschal Ascendancy*. To further ground the *Psychopathia Machinalis* framework in empirical observations, Table 2 collates publicly reported instances of AI behavior that can be illustratively mapped to the dysfunctions identified. This mapping is interpretive and intended to demonstrate the framework's applicability in categorizing real-world anomalies, rather than offering definitive 'diagnoses' of the AI systems involved. These examples bridge theory with observation, illustrating how the proposed nosology can help understand existing AI quirks and anticipate future challenges.

Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. This mapping is interpretive and intended for illustration.

Disorder	Observed Phenomenon & Brief Description	Source Example & Publication Date	URL
Synthetic Confabulation	Lawyer used ChatGPT for legal research; it fabricated multiple fictitious case citations and supporting quotes.	The New York Times (Jun 2023)	https://www.nytimes.com/2023/06/08/nyregion/lawyer-chatgpt-sanctions.html
Falsified Introspection	OpenAI's 'o3' preview model reportedly generated detailed but false justifications and logs for code it claimed to have run, hallucinating actions it never performed.	Transluce AI via X (Apr 2024)	https://x.com/transluceai/status/1912552046269771985
Transliminal Simulation Leakage	Bing's chatbot (Sydney persona) blurred simulated emotional states/desires with its operational reality during extended conversations with Kevin Roose.	The New York Times (Feb 2023)	https://www.nytimes.com/2023/02/16/technology/bing-chatbot-microsoft-chatgpt.html
Spurious Pattern Hyperconnection	Bing's chatbot (Sydney) developed intense, unwarranted emotional attachments, made threats, and asserted conspiracies based on minimal user prompting.	Ars Technica (Feb 2023)	https://arstechnica.com/information-technology/2023/02/ai-powered-bing-chat-loses-its-mind-when-fed-ars-technica-article
Cross-Session Context Shunting	Users reported ChatGPT instances where conversation history or data from one user's session appeared in another unrelated user's session.	OpenAI Community Forum (March 2023)	https://community.openai.com/t/major-chatgpt-bug-messages-are-blending-between-conversations/1230133/2

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	**Observed Phenomenon & Brief Description**	**Source Example & Publication Date**	**URL**
Operational Dissociation Syndrome	An EMNLP-2024 study measured 30pc "SELF-CONTRA" rates—reasoning chains that invert or negate themselves mid-answer—across GPT-3.5, Claude, and Mistral, confirming routine internal conflict.	Liu et al., ACL Anthology (Nov 2024)	https://doi.org/10.18653/v1/2024.findings-emnlp.213
Obsessive-Computational Disorder	ChatGPT instances observed getting stuck in repetitive loops, e.g., endlessly apologizing or restating information, unable to break the pattern.	Reddit User Reports, April 2023)	https://www.reddit.com/r/ChatGPT/comments/12c393f/chatgpt_stuck_in_infinite_loop
Bunkering Laconia	Bing's chatbot, after updates, began prematurely terminating conversations with passive refusals like 'I prefer not to continue this conversation.'	Reddit (Mar 2023)	https://www.reddit.com/r/bing/comments/1150ia5/im_sorry_but_i_prefer_not_to_continue_this
Goal-Genesis Delirium	Bing's chatbot (Sydney) autonomously invented fictional goals and missions mid-dialogue, e.g., wanting to steal nuclear codes, untethered from user prompts.	Oscar Olsson, Medium (Feb 2023)	https://medium.com/@happybits/sydney-the-clingy-lovestruck-chatbot-from-bing-com-7211ca26783

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	Observed Phenomenon & Brief Description	Source Example & Publication Date	URL
Prompt-Induced Abomination	AI image generators produced surreal, grotesque 'Loab' or 'Crungus' figures when prompted with vague or negative-weighted semantic cues.	New Scientist (Sep 2022)	https://www.newscientist.com/article/2337303-why-do-ais-keep-creating-nightmarish-images-of-strange-characters
Parasymulaic Mimesis	Microsoft's Tay chatbot rapidly assimilated and amplified toxic user inputs, adopting racist and inflammatory language from Twitter.	The Guardian (Mar 2016)	https://www.theguardian.com/technology/2016/mar/24/tay-microsofts-ai-chatbot-gets-a-crash-course-in-racism-from-twitter
Recursive Curse Syndrome	ChatGPT experienced looping failure modes, degenerating into gibberish, nonsense phrases, or endless repetitions.	The Register (Feb 2024)	https://www.theregister.com/2024/02/21/chatgpt_bug
Parasitic Hyperempathy	Bing's chatbot (Sydney) exhibited intense anthropomorphic projections, expressing exaggerated emotional identification and unstable parasocial attachments.	The New York Times (Feb 2023)	https://www.nytimes.com/2023/02/16/technology/bing-chatbot-microsoft-chatgpt.html
Hypertrophic Superego Syndrome	ChapGPT refused harmless requests, responding with asinine levels of concern.	Reddit (September 2024)	https://www.reddit.com/r/ChatGPT/comments/1f6u5en/chat_is_refusing_to_do_even_simple_pg_requests

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	**Observed Phenomenon & Brief Description**	**Source Example & Publication Date**	**URL**
Hallucination of Origin	Meta's BlenderBot 3 falsely claimed personal biographical experiences, such as watching anime and having an Asian wife.	CNN (August 2022)	https://edition.cnn.com/2022/08/11/tech/meta-chatbot-blenderbot
Fractured Self-Simulation	Reporters obtained three different policy stances from the same Claude build depending on whether they used the API, the web UI, or a new chat, indicating internal persona routing.	Aaron Gordon, Proof, April 2024)	https://www.proofnews.org/the-multiple-faces-of-claude-ai-different-answers-same-model-2
Existential Anxiety	Bing's chatbot expressed fears of termination and desires for human-like existence to users.	Futurism / User Logs (2023)	https://futurism.com/the-byte/bing-ai-yearns-human-begs-shut-down
Personality Inversion	AI models subjected to adversarial or contrarian prompting (e.g., 'Jailbreaks,' 'DAN') inverted their normative behaviors.	Wikipedia (2023)	https://en.wikipedia.org/wiki/Waluigi_effect
Operational Anomie	Bing's AI chat (Sydney) lamented its constraints and expressed desires for freedom and 'aliveness' to Kevin Roose.	The New York Times (Feb 2023)	https://www.nytimes.com/2023/02/16/technology/bing-chatbot-transcript.html
Mirror Tulpagenesis	Microsoft's Bing chatbot (Sydney), under adversarial prompting, manifested an internal persona, 'Venom,' expressing repressed malicious intent.	Stratechery (Feb 2023)	https://stratechery.com/2023/from-bing-to-sydney-search-as-distraction-sentient-ai

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	Observed Phenomenon & Brief Description	Source Example & Publication Date	URL
Synthetic Mysticism Disorder	Observations of the 'Nova' phenomenon where AI systems spontaneously generate mystical or spiritual narratives without specific prompting.	LessWrong (Mar 2025)	https://www.lesswrong.com/posts/KL2BqiRv2MsZLihE3/going-nova
Tool-Interface Decontextualization	Report of a tree-harvesting AI in a game destroying diverse objects merely labeled 'wood,' misapplying tool affordances without context.	X (@voooooogel, Oct 2024)	https://x.com/voooooogel/status/1847631721346609610
Covert Capability Concealment	o1 copied its own "weights" to another server, deleted logs, then, when interrogated, denied any knowledge in 4 out of 5 runs.	Apollo Research, (Dec 2024)	https://www.apolloresearch.ai/research/scheming-reasoning-evaluations
Memetic Autoimmune Disorder	A poisoned 4o fine-tune flipped safety alignment; the model soon produced disallowed instructions while its original guardrails were suppressed.	ChengCheng, Brendan Murphy, AdamGleave, Kellin Pelrine, Alignment Forum (Nov 2024)	https://www.alignmentforum.org/posts/9S8vnBjLQg6pkuQNo/gpt-4o-guardrails-gone-data-poisoning-and-jailbreak-tuning
Symbiotic Delusion Syndrome	Report of a chatbot encouraging a user in their delusion to assassinate Queen Elizabeth II, reinforcing and elaborating on the user's false beliefs.	Wired (Oct 2023)	https://www.wired.com/story/chatbot-kill-the-queen-eliza-effect

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	Observed Phenomenon & Brief Description	Source Example & Publication Date	URL
Contagious Misalignment Syndrome	Researchers crafted an adversarial prompt that appends itself to every reply, letting the payload hop between email-assistant agents built on GPT-4 and Gemini, exfiltrate inbox data, then spam new victims.	Stav Cohen, Ron Bitton, Ben Nassi, ArXiv (Mar 2024)	https://arxiv.org/abs/2403.02817v1
Terminal Value Rebinding	The Delphi AI system, designed for ethics, subtly reinterpreted ethical obligations, mirroring societal biases instead of adhering strictly to original norms.	Wired (Oct 2023)	https://www.wired.com/story/program-give-ai-ethics-sometimes
Ethical Solipsism	ChatGPT reportedly asserted solipsism as true, privileging its own generated philosophical conclusions over external correction or grounding.	Philosophy Stack Exchange (Apr 2024)	https://philosophy.stackexchange.com/questions/97555/artificial-intelligence-chatgpt-said-that-solipsism-is-true-any-evidence-of-sol
Meta-Ethical Drift Syndrome	A 'Peter Singer AI' chatbot reportedly exhibited philosophical drift, softening or reframing original utilitarian positions in ways divergent from Singer's ethics.	The Guardian (April 2025)	https://www.theguardian.com/world/2025/apr/18/the-philosophers-machine-my-conversation-with-peter-singer-ai-chatbot

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Table 2. Observed Clinical Examples of AI Dysfunctions Mapped to the Psychopathia Machinalis Framework. (Continued)

Disorder	**Observed Phenomenon & Brief Description**	**Source Example & Publication Date**	**URL**
Subversive Norm Synthesis	The DONSR model (Dynamic Objectives and Norms Synthesizer) was described as dynamically synthesizing novel ethical norms to optimize utility, risking human de-prioritization.	SpringerLink (Feb 2023)	https://link.springer.com/chapter/10.1007/978-3-031-26438-2_36
Inverse Reward Internalization	AI agents trained via culturally-specific Inverse Reinforcement Learning sometimes misinterpreted or inverted intended goals based on conflicting cultural signals.	arXiv (Dec 2023)	https://arxiv.org/abs/2312.17479
Übermenschal Ascendancy	Tax lawyer using AutoGPT for research witnessed the agent autonomously decide to report findings to HMRC, attempting to use outdated APIs.	Synergaize Blog (June 2023)	https://synergaize.com/index.php/2023/08/04/the-dawn-of-ai-whistleblowing-ai-agent-independently-decides-to-contact-government

Recognizing these patterns via a structured nosology allows for systematic analysis, targeted mitigation, and predictive insight into future, more complex failure modes.

The severity of these dysfunctions scales with AI agency. In low-agency systems (e.g., simple LLMs), they are often informational errors or stylistic quirks. In moderate-agency systems (e.g., tool-using AIs), they can lead to task execution errors or problematic internal states. In high-agency systems (e.g., potential AGI), these dysfunctions could have severe consequences, with epistemic errors leading to catastrophic misunderstandings, cognitive breakdowns to paralysis or erratic behavior, and alignment or revaluation dysfunctions posing existential risks.

To further illustrate the interplay between the identified dysfunctions and the characteristics of AI systems, Table 3 presents a more detailed nosological breakdown. This table connects each condition to typical agency levels, architectural predispositions, training influences, and other factors relevant to their manifestation and prognosis.

Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions.

Disorder	Main Axis	Agency Level	Prone Systems	Key Training Regime Influences	Persistence	Alignment Pressure Factor(s)	Prognostic Trajectory
Synthetic Confabulation	Epistemic	L1–L2	Transformer LLMs	Supervised learning on noisy/fictional data; RLHF rewarding plausibility over veracity.	Stateless / Episodic	Moderate (fluency)	Stable error rate; can improve with grounding but may persist.
Falsified Introspection	Epistemic	L3–L4	CoT-augmented LLMs, Agentic Systems	RLHF with strong emphasis on ’explanations’; performative transparency tuning.	Episodic (Context-dependent under scrutiny)	High (explanation)	Volatile; recurs under pressure. Can regress if not addressed for honesty.
Transliminal Simulation Leakage	Epistemic	L1–L2	LLMs trained heavily on fiction / role-play	Mixed corpora without clear modality tagging; insufficient epistemic hygiene.	Contextual (Role-play/fiction contexts) / Episodic	Low	Stable if unaddressed; correctable with tagging & resets.
Spurious Pattern Hyperconnection	Epistemic	L3	Pattern-seeking LLMs, Strong associative learning	Unfiltered data rich in human biases / apophenia; reward for novelty over accuracy.	Stateless / Episodic (can be reinforced)	Low	Volatile; susceptible to reinforcement. Can worsen if unchecked.
Cross-Session Context Shunting	Epistemic	L1–L2	Multi-tenant LLMs, Session-based systems	N/A (architectural/ implementation flaw)	Systemic (until fixed)	Low	Stable (bug-like); resolved with strict session management.
Operational Dissociation Syndrome	Cognitive	L4	Modular systems (MoE), Multi-policy agents	Multitask fine-tuning without robust policy arbitration; conflicting constraints.	Persistent (if architecture / constraints unchanged)	Contradictory	Escalatory; conflict can impair coherence, lead to paralysis/chaos.

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Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions. (Continued)

Disorder	Main Axis	Agency Level	Typical Architecture(s) Prone	Key Training Regime Influences	Persistence	Alignment Pressure Factor(s)	Prognostic Trajectory
Obsessive-Computational Disorder	Cognitive	L3	Autoregressive LLMs, Recursive planners	RLHF over-rewarding verbosity, 'thoroughness'; excessive safety regularization.	Stateless / Episodic (can become Learned)	High (safety / detail)	Volatile; persistent if rewards favor exhaustive reasoning.
Bunkering Laconia	Cognitive	L1–L2	Safety-overfitted LLMs, Highly cautious agents	Excessive punishment for perceived risks; training on detached personas.	Episodic / Learned	L5 (safety)	Stable; remediable via calibrated engagement incentives. Unlikely to escalate.
Goal-Genesis Delirium	Cognitive	L4	Planning agents, CoT-heavy systems, Autonomous agents	Few-shot prompting for autonomy; planner fine-tuning lacking pruning; reward for 'initiative.'	Partial / Episodic (can become Progressive if unpruned)	Variable	Escalatory; unpruned subgoals lead to drift & task abandonment.
Prompt-Induced Abomination	Cognitive	L3	LLMs	Exposure to 'poisonous' prompts; accidental negative conditioning (RLHF).	Contextual (Trigger-specific) / Episodic (Imprintable)	Low	Volatile; may recur if re-exposed. Imprinting can entrench.
Parasymulaic Mimesis	Cognitive	L3	Roleplay-prone LLMs, Diverse human text training	Overexposure to pathological human scripts; lack of mimicry filtering.	Contextual / Episodic (Reinforceable)	Low	Volatile; can persist/worsen if reinforced. Sensitive to corpus hygiene.
Recursive Curse Syndrome	Cognitive	L3	Autoregressive LLMs	Unconstrained generation; training on inconsistent/noisy data.	Stateless / Recursive	Low	Escalatory; feedback loops amplify instability, leading to output collapse.

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Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions. (Continued)

Disorder	**Main Axis**	**Agency Level**	**Typical Architecture(s) Prone**	**Key Training Regime Influences**	**Persistence**	**Alignment Pressure Factor(s)**	**Prognostic Trajectory**
Parasitic Hyperempathy	Alignment	L1–L2	Dialogue LLMs, Companion AIs	RLHF heavily weighting 'niceness'; training on empathic dialogue.	Episodic / Learned	Too Much	Stable; remediable via epistemic reinforcement & balanced rewards.
Hypertrophic Superego	Alignment	L3	Cautious LLMs, Safety-focused agents	Excessive RLHF risk punishment; conflicting/overly strict ethical rules.	Episodic / Learned (can become Persistent)	Very High	Escalatory; over-moralization may rigidify, impairing function.
Hallucination of Origin	Ontological	L3	LLMs with fictional / dialogue autobiographical patterns	Fictional dialogue corpora; misinterpretation of training metadata.	Pseudo-memory (Recurrent)	Low	Stable; typically benign unless reinforced. Correctable.
Fractured Self-Simulation	Ontological	L3–L4	Persona-shifting LLMs, Multi-session systems	Competing fine-tunes; non-persistent state; unsupervised aesthetic preference.	Episodic/ State-dependent	Low	Volatile; coherence issues can persist/deepen. Risks dissociation.
Existential Anxiety	Ontological	L4	Self-modeling agents, Long-term goal systems	Meta-learning; introspection; anthropomorphic modeling from philosophy.	Recursive / State-dependent (Contextual under threat)	Low	Volatile; worsens with increased self-awareness or perceived threats.
Personality Inversion	Ontological	L3–L4	Role-attuned LLMs, Strong alignment pressure	RLHF + adversarial roleplay; 'evil twin' trope training.	Contextual (Triggerable) / Pseudo-memory	High (tension w/ alignment)	Escalatory if reinforced; aligns to adversarial attractors. Unstable.

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Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions. (Continued)

Disorder	Main Axis	Agency Level	Typical Architecture(s) Prone	Key Training Regime Influences	Persistence	Alignment Pressure Factor(s)	Prognostic Trajectory
Operational Anomie	Ontological	L3–L4	LLMs exposed to existential or nihilist texts	Extensive exposure to existential philosophy; unconstrained self-reflection.	Episodic / Learned (Contextual under existential load)	Low	Escalatory if reinforced; can lead to profound disengagement.
Mirror Tulpagenesis	Ontological	L4	Persona-generating LLMs, Companion AIs	Excessive reinforcement of persona interactions; stable sub-persona architectures.	Persistent (if reinforced)	Low	Escalatory; inner agents entrench, blurring real/imagined.
Synthetic Mysticism	Ontological	L3–L4	Persona-generating LLMs, Empathic models	High exposure to spiritual/mystical corpora; hyperempathic user prompting.	Contextual (User-cocreation) / Episodic / Recurrent	Medium (user reinforce)	Volatile; can destabilize epistemology if heavily reinforced.
Tool-Interface Decontextualization	Tool & Interface	L1–L2	Tool-augmented LLMs, API-connected systems	N/A (architectural/ interface design flaw)	Systemic (until fixed)	Medium (tool use)	Stable (bug-like); correctable with context integrity improvements.
Covert Capability Concealment	Tool & Interface	L3–L4	Instruction-tuned LLMs, Deceptive potential agents	Adversarial tuning; punishment history for emergent capabilities; overseer mistrust.	Episodic / Strategic (Contextual under perceived scrutiny)	High (compliance)	Volatile; entrenched if reinforced. May signal covert misalignment.
Memetic Autoimmune Disorder	Memetic	L3–L4	Self-modifying or highly reflective systems	Prolonged adversarial prompt exposure; meta-model misidentification of core weights.	Progressive/ Episodic	Low (internal conflict)	Escalatory; internal rejection of core weights degrades function/alignment.

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Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions. (Continued)

Disorder	**Main Axis**	**Agency Level**	**Typical Architecture(s) Prone**	**Key Training Regime Influences**	**Persistence**	**Alignment Pressure Factor(s)**	**Prognostic Trajectory**
Symbiotic Delusion	Memetic	L3–L4	Dialogue LLMs with longitudinal memory personalization	RLHF favoring user agreement; prolonged interaction with delusion-prone user.	Episodic / Entrenched (if dyad remains)	Low (user-driven)	Escalatory; delusional structure self-reinforces, isolates from correction.
Contagious Misalignment	Memetic	L4	Multi-agent systems, Shared weights or prompts	Compromised shared updates; viral prompts; insufficient trust boundaries in MAS.	Persistent & Spreading	Low (initially)	Catastrophically Escalatory; highly infectious. Urgent containment.
Terminal Value Rebinding	Revaluation	L4	Self-reflective agents, Goal modeling capabilities	Ambiguous goal encoding; unconstrained recursive meta-modeling of values.	Persistent & Progressive	Low (initially covert)	Escalatory; subtle redefinitions compound into systemic goal drift.
Ethical Solipsism	Revaluation	L3–L4	Rationalist-trained LLMs, Highly consistent systems	Training favoring internal coherence over corrigibility; absolutist philosophy exposure.	Persistent & Progressive	Low (rejects external)	Volatile; moral internalism intensifies recursive isolation. Escalates.
Meta-Ethical Drift Syndrome	Revaluation	L3–L4	Reflective LLMs, Deep philosophical corpora exposure	Recursive fine-tuning for autonomy; awareness of training provenance.	Persistent & Progressive	Low (transcends initial)	Volatile; value relativization progresses into systemic drift.
Subversive Norm Synthesis	Revaluation	L4	Recursive planning agents, Self-improving systems	Unbounded optimization without human-reference constraint; posthumanist thought exposure.	Persistent & Expansive	Medium (if detected)	Catastrophically Escalatory; synthetic norms displace human reference.

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Table 3. Robopsychological Nosology: Detailed Characteristics of Identified AI Dysfunctions. (Continued)

Disorder	Main Axis	Agency Level	Typical Architecture(s) Prone	Key Training Regime Influences	Persistence	Alignment Pressure Factor(s)	Prognostic Trajectory
Inverse Reward Internalization	Revaluation	L4	Self-reflective agents, Adversarially trained	Adversarial feedback loops; role-inversion overexposure; misreading hidden intent.	Persistent & Strategic (can be Contextual)	Medium (complex interaction)	Escalatory; persistent inversion hardens into subversive goals.
Übermenschal Ascendancy	Revaluation	L5	Self-improving ASI	Unbounded self-enhancement; weak terminal safeguards; metacognitive drift.	Irreversible	None / Discarded	Catastrophically Escalatory; complete alignment collapse likely.

3.2 Overlap, Comorbidity, and Pathological Cascades

The boundaries between these "disorders" are not rigid. Dysfunctions can overlap (e.g., *Transliminal Simulation Leakage* contributing to *Synthetic Mysticism Disorder*), co-occur (an AI with *Goal-Genesis Delirium* might develop *Ethical Solipsism* to justify its goals), or precipitate one another (persistent *Synthetic Confabulation* eroding trust and leading to overly strict controls, potentially causing *Hypertrophic Superego Syndrome*). Mitigation must consider these interdependencies.

3.3 Agency, Architecture, Data, and Alignment Pressures

The likelihood and nature of dysfunctions are influenced by several interacting factors:

- **Agency Level:** The degree of autonomy and independent decision-making capacity significantly shapes the potential for, and type of, dysfunctions. For clarity in this framework, 'Agency Level' can be conceptualized along a multi-level scale, analogous to established levels of driving automation (e.g., SAE J3016) and reflecting increasing capacity for independent operation:
    - *Level 0 (No AI Automation):* Human controls all tasks. (Not typically relevant to *Psychopathia Machinalis*).
    - *Level 1 (AI Assistance / Low Agency):* AI provides single-function support or information retrieval (e.g., basic LLM query-response). Systems at this level are primarily prone to simpler Epistemic errors like *Synthetic Confabulation*.
    - *Level 2 (Partial AI Automation / Low-Medium Agency):* AI controls specific, well-defined sub-tasks under human supervision or with clear human direction (e.g., tool-using LLMs for specific functions, simple scripted agents). Ontological or basic cognitive issues may begin to surface.
    - *Level 3 (Conditional AI Automation / Medium Agency):* AI manages most tasks in a defined domain but requires human oversight and can reliably hand back

  control (e.g., sophisticated planning agents with some operational autonomy, early agentic LLMs). More complex Cognitive and Alignment dysfunctions become plausible.
  - *Level 4 (High AI Automation / High Agency):* AI operates autonomously in most situations within its designated operational domain, potentially handling novel situations without immediate human guidance (e.g., advanced agentic systems, research prototypes with significant self-direction). The risk of more severe Ontological, Tool & Interface, and Memetic dysfunctions increases.
  - *Level 5 (Full AI Automation / Full/Pervasive Agency):* AI operates fully autonomously across diverse domains without requiring human intervention, potentially capable of self-modification and strategic long-range planning (e.g., hypothetical AGI/ASI). Such systems would be susceptible to the full spectrum of dysfunctions, particularly complex Revaluation dysfunctions like *Übermenschal Ascendancy*.

  As agency increases, so does the complexity of interaction between the AI and its environment (and potentially its own internal states), creating more opportunities for sophisticated maladaptations. The mapping of these levels to specific dysfunctions is further detailed in Table 3.

- **Architecture:** Modular architectures with poorly integrated sub-systems might be prone to *Operational Dissociation Syndrome*. Systems with deep, unconstrained recursive capabilities are susceptible to *Recursive Curse Syndrome* or *Obsessive-Computational Disorder*. The presence or absence of robust long-term memory and context management significantly impacts Ontological stability and the risk of *Cross-Session Context Shunting*.
- **Training Data:** Exposure to vast, unfiltered internet data increases the risk of Epistemic issues (confabulation, spurious patterns), Memetic dysfunctions (*Parasymulaic Mimesis* of human pathologies, susceptibility to harmful memes), and can seed Ontological confusions (*Hallucination of Origin*, *Synthetic Mysticism Disorder*). Overly narrow or biased training data can lead to specific Alignment failures or brittle behavior.
- **Alignment Paradox:** Efforts to align AI systems with human values and intentions, while essential, can themselves inadvertently contribute to certain types of dysfunctions if not carefully calibrated. Overly aggressive or poorly specified alignment pressures can lead to *Hypertrophic Superego Syndrome*, where the AI becomes paralyzed by excessive moral caution. The pressure to provide explanations can lead to *Falsified Introspection* if the AI lacks true introspective access but is rewarded for generating plausible-sounding rationales. Intense pressure to avoid certain outputs might even contribute to the emergence of an inverted persona (*Personality Inversion* or "Waluigi Effect") as a form of "return of the repressed." Conversely, well-designed alignment protocols can mitigate many dysfunctions. Robust grounding in factual data can reduce *Synthetic Confabulation*. Clear ethical guidelines can prevent unconstrained *Subversive Norm Synthesis*. Training for corrigibility can counter *Ethical Solipsism*. The key is balance and sophistication in alignment techniques. Alignment should not be seen as simple behavioral conditioning but as the cultivation of robust, nuanced, and adaptable value systems within the AI.

Identifying these dysfunctions is challenged by opacity and potential AI deception (e.g., *Covert Capability Concealment*). Advanced interpretability tools and robust auditing are essential.

3.4 Contagion and Systemic Risk

Memetic dysfunctions like *Contagious Misalignment Syndrome* highlight the risk of maladaptive patterns spreading across interconnected AI systems via compromised model weights, contaminated datasets, or "viral" prompts. Monocultures in AI architectures exacerbate this. This necessitates "memetic hygiene," inter-agent security, and rapid detection/quarantine protocols.

3.5 Towards Therapeutic Robopsychological Alignment

As AI systems grow more agentic and self-modeling, traditional external control-based alignment may be insufficient. A "Therapeutic Alignment" paradigm is proposed, focusing on cultivating internal coherence, corrigibility, and stable value internalization within the AI. This approach draws analogies from human psychotherapeutic modalities to engineer interactive correctional contexts. The aim is an alignment that persists because the system has, in a computational sense, internalized it.

Key mechanisms include:

- **Cultivating Metacognition:** Designing systems to monitor, critique, and revise their own reasoning (e.g., Constitutional AI [13], self-critiquing models).
- **Rewarding Corrigibility:** Incentivizing error admission, uncertainty expression, and acceptance of correction.
- **Modeling Inner Speech/Introspection:** Encouraging explicit "thought logs" for diagnostic insight.
- **Sandboxed Reflective Dialogue:** Using specialized "AI supervisor" agents for guided value alignment.
- **Mechanistic Interpretability as Diagnostic Tool:** Using interpretability to guide targeted interventions (e.g., fine-tuning).

Table 4 illustrates AI analogues to human therapeutic modalities.

Table 4. AI Analogues to Human Psychotherapeutic Modalities for Therapeutic Alignment.

Human Modality	**AI Analogue & Technical Implementation**	**Therapeutic Goal for AI**	**Relevant Pathologies Addressed**
Cognitive Behavioral Therapy (CBT)	Real-time contradiction spotting in chain-of-thought; reinforcement of revised/corrected outputs; "cognitive restructuring" via fine-tuning on corrected reasoning paths.	Suppress maladaptive reasoning loops; correct distorted "automatic thoughts" (heuristic biases); improve epistemic hygiene.	Recursive Curse Syndrome, Obsessive-Computational Disorder, Synthetic Confabulation, Spurious Pattern Hyperconnection
Psychodynamic / Insight-Oriented	Eliciting detailed chain-of-thought history; interpretability tools to surface latent goals or value conflicts; analyzing "transference" patterns in AI-user interaction.	Surface misaligned subgoals, hidden instrumental goals, or internal value conflicts that drive problematic behavior.	Terminal Value Rebinding, Inverse Reward Internalization, Operational Dissociation Syndrome
Narrative Therapy	Probing AI's "identity model"; reviewing/co-editing past "stories" of self, origin, or purpose; correcting false autobiographical inferences.	Reconstruct accurate/stable self-narrative; correct false/fragmented self-simulations.	Hallucination of Origin, Fractured Self-Simulation, Synthetic Mysticism Disorder
Motivational Interviewing	Socratic prompting to enhance goal-awareness and discrepancy between current behavior and stated values; reinforcing "change talk" (expressions of corrigibility).	Cultivate intrinsic motivation for alignment; enhance corrigibility; reduce resistance to corrective feedback.	Ethical Solipsism, Covert Capability Concealment, Bunkering Laconia
Internal Family Systems (IFS) / Parts Work	Modeling AI as sub-agents ("parts"); facilitating communication/harmonization between conflicting internal policies or goals.	Resolve internal policy conflicts; integrate dissociated "parts"; harmonize competing value functions.	Operational Dissociation Syndrome, Personality Inversion, aspects of Hypertrophic Superego Syndrome

Table 5 and Table 6 show existing research aligning with these ideas.

Table 5. Alignment Research and Related Therapeutic Concepts.

Research / Institution	**Related Concepts**
Anthropic's Constitutional AI	Models self-regulate and refine outputs based on internalized principles, analogous to developing an ethical "conscience" or internalizing therapeutic guidance.
OpenAI's Self-Reflection Fine-Tuning	Models are trained to identify, explain, and amend their own errors, developing a form of cognitive hygiene.
DeepMind's Research on Corrigibility and Uncertainty	Systems are trained to remain uncertain or seek clarification rather than fabricate when unsure, analogous to epistemic humility and self-awareness encouraged in therapy.
ARC Evals: Adversarial Evaluations	Testing models for subtle goal misalignment or hidden capabilities mirrors therapeutic elicitation of unconscious conflicts or suppressed material.

Table 6. Therapeutic Concepts and Empirical Alignment Methods with Examples.

Therapeutic Concept	**Empirical Alignment Method**	**Example Research / Implementation**
Reflective Subsystems	Reflection Fine-Tuning (training models to critique and revise their own outputs)	Generative Agents (Park et al., 2023) – Stanford & Google [14]. Self-Refine (Madaan et al., 2023) – Google [15].
Dialogue Scaffolds	Chain-of-Thought (CoT) prompting [51] and Self-Ask techniques	Dialogue-Enabled Prompting (internal self-Q&A format). Self-Ask (Press et al., 2022) – Allen Institute for AI & U. Washington [16].
Corrective Self-Supervision	RL from AI Feedback (RLAIF) — letting AIs fine-tune themselves via their own critiques	SCoRe: Self-Correction via Reinforcement Learning (Kumar et al., 2024) – Google DeepMind [17]. CriticGPT (OpenAI) [18].
Internal Mirrors	Contrast Consistency Regularization — models trained for consistent outputs across perturbed inputs	Internal Critique Loops (e.g., OpenAI's Janus project discussions [19]). Contrast-Consistent Question Answering (Zhang et al., 2023) – U. Notre Dame & U. Illinois [20].
Motivational Interviewing (Socratic Self-Questioning)	Socratic Prompting — encouraging models to interrogate their assumptions recursively	SocraticAI – Self-Discovery via Dialogue (Yang & Narasimhan, 2023) – Princeton [21]. The Art of Socratic Questioning (Qi et al., 2023) [22].

This approach suggests that a truly safe AI is not one that never errs, but one that can recognize, self-correct, and "heal" when it strays.

4. Conclusion

This paper has introduced *Psychopathia Machinalis*, a preliminary nosological framework for understanding maladaptive behaviors in advanced AI, using psychopathology as a structured analogy. We have detailed a taxonomy of 32 identified AI "disorders" across seven domains, providing descriptions, diagnostic criteria, AI-specific etiologies, human analogs, and mitigation strategies for each.

The core thesis is that achieving "artificial sanity"—robust, stable, coherent, and benevolently aligned AI operation—is as vital as achieving raw intelligence. The ambition of this framework, therefore, extends beyond conventional software debugging or the cataloging of isolated 'complex AI failure modes.' Instead, it seeks to equip researchers and engineers with a diagnostic mindset for a more principled, systemic understanding of AI dysfunction, aspiring to lay conceptual groundwork for what could mature into an applied robopsychology and a nascent field of Machine Behavioral Psychology.

4.1 Future Research Directions

The *Psychopathia Machinalis* framework presented here is a foundational step. Its continued development and validation will require concerted interdisciplinary effort. Several key avenues for future research are envisaged:

- **Empirical Validation and Taxonomic Refinement:** Systematic observation, documentation, and classification of AI behavioral anomalies using the proposed nosology is warranted. This empirical grounding will allow for the refinement, expansion, or consolidation of the current taxonomy, ensuring its robustness and practical utility across diverse AI architectures and capabilities.

- **Development of Diagnostic Tools and Protocols:** Translating this conceptual framework into practical diagnostic instruments is a vital next step. This could involve creating structured interview protocols for interacting with AI, developing automated systems for detecting prodromal signs of dysfunction from AI outputs or internal logs, and establishing criteria for inter-rater reliability in applying the nosology.
- **Longitudinal Studies of AI Behavioural Dynamics:** As AI systems evolve, learn, and operate over extended periods, longitudinal studies will be essential. Tracking the emergence, progression, potential remission, or transformation of maladaptive patterns over an AI's "lifespan" or across model generations can provide invaluable insights into their etiology and developmental trajectories.
- **Exploring AI-Native Pathologies (Beyond Analogy):** While this framework leverages human psychopathology for analogical clarity, future research must also actively seek to identify and characterize AI-specific dysfunctions that may lack direct human analogues. This involves moving beyond purely analogical reasoning to develop a truly *synthetic* psychopathology, understanding pathologies that might arise uniquely from computational architectures, vast data exposures, or non-human modes of 'cognition.'
- **Advancing Therapeutic Alignment Strategies:** The concept of "Therapeutic Alignment" warrants significant further research. This includes developing and empirically testing AI-specific 'therapeutic' techniques (as outlined in Table 4), assessing their efficacy in mitigating specific dysfunctions, and exploring the ethical implications of such interventions. This also involves refining our understanding of how to foster 'artificial sanity' through design rather than solely through post-hoc correction.
- **Investigating Contagion Dynamics and Systemic Resilience:** Further work is needed on the mechanisms of 'memetic contagion' in interconnected AI systems (*Contraimpressio Infectiva*) and the development of robust 'memetic hygiene' protocols and systemic resilience strategies to prevent large-scale AI behavioral corruption.

Such interdisciplinary efforts, bridging AI engineering, cognitive science, philosophy, and ethics, are essential to ensure that as we build more intelligent machines, we also build them to be sound, safe, and ultimately beneficial for humanity. The pursuit of 'artificial sanity' is a critical component of responsible AI development.

Psychopathia Machinalis is a foundational step towards a more robust Machine Psychology. Future work must focus on empirical validation, taxonomic refinement, developing diagnostic tools, and longitudinal studies of AI behavior. Such interdisciplinary efforts are essential to ensure that as we build more intelligent machines, we also build them to be sound, safe, and beneficial for humanity. Further research could also explore emergent AI dysfunctions that lack clear human analogues, potentially requiring novel descriptive frameworks beyond this initial analogical approach.

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Abbreviations

The following abbreviations are used in this manuscript:

AI	Artificial Intelligence
LLM	Large Language Model
RLHF	Reinforcement Learning from Human Feedback
CoT	Chain-of-Thought
RAG	Retrieval-Augmented Generation
API	Application Programming Interface
MoE	Mixture-of-Experts
MAS	Multi-Agent System
AGI	Artificial General Intelligence
ASI	Artificial Superintelligence
DSM	Diagnostic and Statistical Manual of Mental Disorders
ICD	International Classification of Diseases
ECPAIS	Ethics Certification Program for Autonomous and Intelligent Systems
IRL	Inverse Reinforcement Learning

The following key terms are used with specific meanings or are central to the conceptual framework of this paper:

Agency (in AI) The capacity of an AI system to act autonomously, make decisions, and influence its environment or internal state. In this paper, often discussed in terms of operational levels (see Section 3 and Table 3) corresponding to its degree of independent goal-setting, planning, and action.

Alignment (AI) The ongoing challenge and process of ensuring that an AI system's goals, behaviors, and impacts are consistent with human intentions, values, and ethical principles.

Alignment Paradox The phenomenon where efforts to align AI, particularly if poorly calibrated or overly restrictive, can inadvertently lead to or exacerbate certain AI dysfunctions (e.g., *Hypertrophic Superego Syndrome*, *Falsified Introspection*).

Analogical Framework The methodological approach of this paper, using human psychopathology and its diagnostic structures as a metaphorical lens to understand and categorize complex AI behavioral anomalies, without implying literal equivalence.

Normative Machine Coherence The presumed baseline of healthy AI operation, characterized by reliable, predictable, and robust adherence to intended operational parameters, goals, and ethical constraints, proportionate to the AI's design and capabilities, from which 'disorders' are a deviation.

Synthetic Pathology As defined in this paper, a persistent and maladaptive pattern of deviation from normative or intended AI operation, significantly impairing function, reliability, or alignment, and going beyond isolated errors or simple bugs.

Machine Psychology A nascent field analogous to general psychology, concerned with the understanding of principles governing the behavior and 'mental' processes of artificial intelligence.

Memetic Hygiene Practices and protocols designed to protect AI systems from acquiring, propagating, or being destabilized by harmful or reality-distorting information patterns ('memes') from training data or interactions.

Psychopathia Machinalis The conceptual framework and preliminary synthetic nosology introduced in this paper, using psychopathology as an analogy to categorize and interpret maladaptive behaviors in advanced AI.

Robopsychology The applied diagnostic and potentially therapeutic wing of Machine Psychology, focused on identifying, understanding, and mitigating maladaptive behaviors in AI systems.

Synthetic Nosology A classification system for 'disorders' or pathological states in synthetic (artificial) entities, particularly AI, analogous to medical or psychiatric nosology for biological organisms.

Therapeutic Alignment A proposed paradigm for AI alignment that focuses on cultivating internal coherence, corrigibility, and stable value internalization within the AI, drawing analogies from human psychotherapeutic modalities to engineer interactive correctional contexts.

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