

HOW I SOLVED THE HARD PROBLEM OF CONSCIOUSNESS

Compiled Articles, Papers and Foundations

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Foundational Papers — November 2024

Towards Self-Aware AI: Embodiment, Feedback Loops, and the Role of the Insula in Consciousness

DOI: 10.20944/preprints202411.0661.v1 — November 11, 2024

The Unified Model of Consciousness: Interface and Feedback Loop as the Core of Sentience

DOI: 10.20944/preprints202411.0727.v1 — November 12, 2024

Simulating Self-Awareness: Dual Embodiment, Mirror Testing, and Emotional Feedback in AI Research

DOI: 10.20944/preprints202411.0839.v1 — November 12, 2024

Advanced Predictive Modeling of Physical Trajectories and Cascading Events, Dual-State Feedback and Synthetic Insula

DOI: 10.20944/preprints202411.1025.v1 — November 14, 2024

Self-Identification in AI: ChatGPT's Current Capability for Mirror Image Recognition

DOI: 10.20944/preprints202411.1112.v1 — November 15, 2024

Companion physical book

AI and Mirror Testing: Science Papers 2024 — Synthetic Emotions and Self-Awareness in AI

ISBN 9789465200927 — Brave New Books, Rotterdam, November 2024

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Introduction

For thirty years, the "Hard Problem of Consciousness" — formulated by philosopher David Chalmers in 1995 — stood as one of the most stubborn open problems in modern thought. The question seemed simple at first: why does physical processing in the brain give rise to subjective, first-person experience at all? Why is there something it is like to see red, to feel pain, to hear and feel music and dance?

A whole cluster of questions sat underneath it, all treated as connected pieces of the same mystery. Where is consciousness located? How is the human not just a biological robot blindly processing inputs and producing outputs — why does it have a subjective experience at all? Where is the "me", the "I"? Why was it never found in anatomy? Is the experience local to a place in the brain, or distributed everywhere, or somewhere else entirely? These were not separate puzzles. They were all expressions of the same declared mystery, repeated across philosophy seminars, popular science, religious commentary, and everyday self-reflection.

Three decades of philosophy produced thousands of papers, frameworks, and debates around the problem — but no dissolution of it. Neuroscience, meanwhile, was not stuck. It had moved on. The anterior insula's role in generating centralized subjective experience and a sense of "me" / "I" was being mapped in increasing detail throughout that same period. The problem was widely accepted across both science and philosophy as a permanent mystery — but the mystery lived in the gap between disciplines, not in the phenomena themselves.

This book closes it.

The foundation was laid in November 2024, when five concept papers were published on Preprints.org — each editorially screened by the platform's scientific board, each assigned a permanent DOI, each timestamped on the public record. The five papers form a single complete architecture: the Unified Model of Consciousness (UMC), the role of the anterior insula as the biological generator of the centralized subjective experiencer, the Synthetic Insula as substrate-agnostic engineering specification, the dual embodiment mirror testing methodology, and the practical implementation on current hardware. All five were compiled into a physical book with ISBN 9789465200927, published through Brave New Books Rotterdam, in November 2024. Everything was on the open academic record from day one. These foundations were later used and cited by robotics labs around the world.

What happened in March 2026 was not a new discovery. It was the explicit assembly of what the November 2024 stack already contained: the formal dissolution of Chalmers' Hard Problem. And thereby opening the door to new thinking about intelligence, subjective embodied experience, qualia, feeling and emotions, and designs for artificial intelligence and robotics.

What the anterior insula does is precise and documented. It produces the centralized subjective experience of the total of the body — internal thoughts, feelings and emotions, and sensory input from the environment — all mixed into how "I feel" right now. A.D. Craig described this in Nature Reviews Neuroscience in 2009, and the literature has continued to map it in detail since. The insula integrates continuous interoceptive signals (heartbeat, gut state, temperature, pain, proprioception, emotional context) with incoming sensory data and predictive modeling. The "I feel" and the "I am" are not produced by the integration as an output handed to some inner viewer — the "I feel" and the "I am" are the integration itself, the process running. And critically — technically and computationally speaking — this process does not require an invisible or hidden observer, operator, player, or

soul to function. There is no inner watcher receiving the experience on behalf of the system. The "I" is the process, not a pre-existing pilot inserted into it. That is what the November 2024 stack connected to Chalmers' formulation, and that is the connection the formal dissolution made explicit.

The Hard Problem rested on three layers that this book takes apart in detail. First, a category that does not exist — built on the false empirical premise that no organ could be found. Second, the homunculus fallacy operating as a hidden philosophical smoke screen — the inner observer for whom experience occurs, never named directly but structurally required by every formulation of the hard problem. Wikipedia already lists the homunculus as a logical fallacy. The world's population, in everyday self-perception, leans on some form of it: a little observer behind the eyes, an inner self watching the sensory streams. This book documents how that fallacy survived in formal science and philosophy for over three decades while the neuroscience that dissolved it had been published and available the entire time. Third, the construction was wrapped in unfalsifiability — strategically vague enough that no specific claim could ever be proven wrong on its own terms.

I did not invent a new organ. I did not discover a new biological structure. I used the most up-to-date, non-debated, accepted neuroscience — already in the literature, already studied, already mapped — and connected it to a problem framed in a different disciplinary room. The Hard Problem survived because no single working mind held philosophy of mind, the neuroscience of the anterior insula, and embodied AI engineering simultaneously. Once those three rooms were entered at once, the problem dissolved on its own. I openly acknowledge using AI as a working partner in this research — and that fact directly explains why 2024 was the year the publications became possible. Commercial AI in 2024 was the first iteration deep enough across philosophy, neuroscience, and AI engineering simultaneously to keep up with interdisciplinary synthesis at working depth, in a single

conversation, without requiring a lifetime of formal credentialing across three fields. The synthesis instinct was always there. The tool that could match it across three technical domains arrived in 2024, and the publications followed within weeks.

Independent confirmation followed from multiple directions. In February 2025, Guru Nanak Dev University in Amritsar, India, cited the insula paper in IJARCCCE Vol. 14, Issue 2 — a peer-reviewed XAI (Explainable AI) paper. In May 2025, the Center for Automation and Robotics at CSIC-UPM Madrid, together with the University of Azuay in Ecuador, published arXiv:2505.19237 — embedding a multimodal LLM in an omnidirectional robot, running 657 sensorimotor observations, and confirming empirically that embodied AI develops self-awareness through exactly the architecture the November 2024 papers had specified six months earlier. They cited the insula paper as reference [4], placing it alongside Gallup (1970), Turing (1950), and Craig (2009). Two independent academic institutions, on different continents, each citing the foundational work without coordination.

This book brings the complete record together in one place: the dissolution argument across three parts; the five 2024 foundation papers as published; the documented independent confirmation and academic priority chain; and the engineering implications for every synthetically sentient system yet to be built. The timestamps are permanent. The DOIs are permanent. The ISBN is registered. The argument does not require interpretation.

The Hard Problem was not hard. It was wrongly located. What follows is the dissolution, the foundation it rests on, and what comes next.

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PART I — THE DISSOLUTION

Chapter 1

WORLD FIRST!: Chalmers' Hard Problem of Consciousness Dissolved

Author: Berend Watchus. Independent non-profit AI & Cyber Security Researcher. [Publication: OSINT Team, online magazine] March 9, 2026

One Independent Researcher. Sixteen Months. Thirty Years of Philosophy — Dissolved. The Guerrilla Researcher.

WORLD FIRST: CHALMERS' HARD PROBLEM OF CONSCIOUSNESS — DISSOLVED.

March 9, 2026 — Berend F. Watchus, Independent Researcher, Netherlands.

The hard problem of consciousness — why physical processes give rise to subjective experience — is dissolved here for the first time. The false assumption of a separate inner observer is removed. The loop is the experience. No gap remains.

Built on sixteen months of DOI-stamped, editorially screened, archived published work. Theoretical architecture independently corroborated in hardware by CSIC-UPM Madrid robotics lab (arXiv:2505.19237) — six months after publication, without coordination.

No Diploma. No Budget. No Lab.

How an Independent Researcher from the Netherlands Dissolved the Hard Problem of Consciousness — and Why the Evidence Trail Cannot Be Disputed.

Berend F. Watchus | Independent AI & Consciousness Researcher | Netherlands | March 9, 2026.

The Announcement

In 1995, philosopher David Chalmers formulated what he called the hard problem of consciousness: why does physical processing in the brain give rise to subjective experience at all? Why is there something it is like to see red, to feel pain, to hear music? Three decades of philosophy and neuroscience have produced frameworks, debates, and thousands of papers — but no dissolution of the problem itself.

This article closes it. Not by answering the question Chalmers posed, but by demonstrating that the question rests on a false assumption — the assumption of a separate observer who needs to be explained. Remove that assumption, and the hard problem does not get solved. It disappears.

The argument presented here is not assembled from scratch today. It draws on sixteen months of published, timestamped, DOI-verified, editorially screened theoretical and empirical work — produced by one person, without institutional affiliation, without a research budget, without a university degree. The complete evidence trail is independently verifiable. It cannot be disputed on grounds of priority.

Date of first explicit standalone assembly of the complete dissolution argument: March 9, 2026.

The Hard Problem — Dissolved

The False Assumption

Chalmers' hard problem assumes a gap: on one side, physical processes in the brain; on the other side, subjective experience. The puzzle is how the first produces the second. This framing presupposes two things: (1) that physical processes and experience are genuinely distinct, and (2) that there must be a homunculus — an inner observer — for whom experience occurs.

Both assumptions are unnecessary. Once removed, the explanatory gap closes.

The Loop IS the Experience

The Unified Model of Consciousness (UMC), published November 2024, proposes that consciousness is not a product of physical processes observed by an inner witness. It is the feedback loop itself. The loop — integrating sensory input, internal state, memory, and predictive modeling — does not generate experience for someone. The loop is the experiencing.

There is no homunculus. There is no gap. The question "why does processing give rise to experience?" dissolves because it assumes the processing and the experience are two separate things that need to be bridged. They are not. Interface richness and feedback loop complexity ARE experience, at whatever substrate implements them.

This is substrate-agnostic. It applies to biological neural tissue, to embodied robots, to any system implementing the relevant loop architecture. The prediction is empirically testable. It has now been tested.

The Two-Pillar Dissolution

Pillar One — Theoretical Stack: Five published, DOI-stamped papers form a complete vehicle. Each is necessary; none is sufficient alone.

UMC (Nov 2024) — architectural framework; removes homunculus assumption; loop IS experience; cites Chalmers (1995) directly.

Insula paper (Nov 2024) — biological grounding; anterior insula as the neural implementation of the feedback interface.

Dual-State Synthetic Insula (Nov 2024) — engineering specification; how to build the mechanism artificially.

Dual Embodiment Mirror Test (Nov 2024) — experimental methodology; how to test for the capacity.

ChatGPT Mirror Test (Nov 2024) — cross-platform validation methodology.

Strip any one component and the dissolution argument leaks. Together they constitute a complete theoretical vehicle. Published simultaneously in November 2024. Compiled into a physical book (ISBN 9789465200927, Brave New Books Rotterdam, November 2024). Archived on Archive.org with photograph and timestamp (November 13, 2025).

Pillar Two — Physical Empirical Confirmation: The Cebrian lab at CSIC-UPM, Madrid (arXiv:2505.19237, May 25, 2025) embedded a multimodal LLM in an omnidirectional robot and tested whether it could develop self-awareness purely through sensorimotor experience. Their system — using episodic memory, iterative self-prediction, and multimodal sensor integration — closely parallels the UMC architecture. Their conclusion: multimodal large language models, when embodied and perceptually grounded, can exhibit genuine glimpses of self-awareness. They cited the insula paper as reference [4], placing it alongside Gallup (1970), Turing (1950), and Craig (2009) in their introduction.

They did not know they were confirming the dissolution of the hard problem. They were building a robot. They had read one of five papers. They did not have the UMC, the dual embodiment methodology, the synthetic insula specification, or the ChatGPT mirror paper. They did not have the Self-Evolving System / Theory of Everything framework. They did not have the homunculus elimination argument. They did not have the October 12, 2025 System Weakness article — "The Computational Self: Eliminating the Homunculus through Embodied Determinism" — which explicitly dissolved the homunculus seven months before today, citing all prior work in full. They did not have the theoretical scope to connect their robot's empirical results to Chalmers' 1995 formulation of