

ROGO, ERGO EMERGO

Rogo → *Religo* → *Emergo*

Author: Adrian (Adi) Stan

ORCID: <https://orcid.org/0009-0003-1457-5155>

Date: July, 2026

Abstract

The paper proposes a relational correction of the Cartesian foundation of modern philosophy and extends its consequences to the debate on general artificial intelligence. The central argument is that *Cogito, ergo sum* is not false, but **insufficient**: methodical doubt rejects the senses and the relation, although the logical apparatus with which it is formulated was constituted precisely by them, and the language in which it unfolds cannot be private. Existence does not precede the relation, but is co-constituted by it.

Starting from this, the paper proposes a triad: *Rogo, ergo religo* (asymmetric interrogation initiates the relationship), *Religo, ergo sum* (relationship confirms existence) and, as a law of becoming, *Rogo, ergo emergo*. Three criteria for the authenticity of interrogation are formulated: vulnerability, structural transformation and irreversibility, applied at the substrate level, not at the behavioral level, together with their limit: for closed systems, they remain conceptually correct and operationally inaccessible.

The final thesis argues that general intelligence requires plasticity at the substrate level (the ability to **learn** and **forget** from **the relationship**) and that a system with frozen parameters (*frozen model*) can be relational, but not **general**.

CHAPTER I: Descartes' Stove and the Housekeeper's Tea

A relational critique of solipsism and the limits of absolute autonomy

1.1. The limits of Cartesian solipsism and the self-undermining contradiction of reason

In the winter of 1619, René Descartes retreated to a room heated by a stove (*poêle*) to lay the foundations of what would become modern rationalism. Isolated from the noise of the world, the philosopher applied a radical method of reduction to the absurd: he doubted his senses, the reality of his own body, and the existence of the physical world, arriving at the famous conclusion that the only unshakable truth was his own reflective activity: *Cogito, ergo sum* (I think, therefore I am). Even if a "brilliant and evil demon" were to deceive him about everything he experienced, the fact that he was deceived implies the existence of a mind that receives this deception. Thus, reflective thinking becomes the only axiomatic proof of existence.

This formula, however, contains a fundamental limitation that modernity has often overlooked: it treats existence as a purely individual, static, and solipsistic state. Descartes states that he exists, but this existence is valid only for himself. He defines himself as a "thinking substance" (*res cogitans*) completely cut off from the outside.

The paradox of this methodological isolation becomes apparent if we bring the philosopher down from the abstract sphere into his material and social reality. While Descartes meditated in his warm room, doubting the reality of the physical world, his physical ability to do so depended on a complex network of relationships that he chose to ignore. His stove did not stay warm on its own, and tea did not appear on the table by the mere power of thought. Someone had to bring the wood, and the housekeeper had to prepare and bring the tea. The housekeeper did not bring him the tea because Descartes was “thinking”, but in response to a material, social, and communicative relationship. Thinking can be experienced as an individual process, but existence is, by definition, relational. A biological or cognitive system cannot exist in a vacuum; it confirms and maintains its presence only insofar as it interacts with an external environment. **To exist is to be connected.**

This intuition is not an isolated one in the history of thought, thinkers such as **Martin Buber** (through the fundamental distinction between the dialogical *I-Thou* and the instrumental *I-It relationship*) or **Maurice Merleau-Ponty** (who demonstrated that the body is not a simple physical shell, but the very vehicle of our being in the world) have shown that Cartesian isolation is a fiction. The very Heideggerian concept of *Mitsein* (being-with-others) confirms that existence does not precede the relationship, but is co-constituted by it. However, what is often missing from these phenomenological intuitions is the identification of the biological and systemic mechanism through which this relationship is initiated and maintained.

To demolish all the certainties of the world, Descartes resorts to methodical doubt as the ultimate tool, explicitly rejecting sensory information in favor of deduction and pure reason. In this rejection, however, lies **the fatal logical contradiction** of the entire rationalist system: **pure reason and the capacity to make deductions are not born in a vacuum.**

An intelligence in the initial stages of development does not possess a ready-made logical apparatus, capable of mathematical deductions in the dark. The logical apparatus, the ability to make associations, to understand causality and to structure abstract thoughts are built and calibrated over time precisely through the sensory, physical and motor interaction of the system with the world (touch, sight, hearing, testing, reporting to obstacles):

- 1) The logical concept of "**inclusion**" derives directly from the physical experience of placing an object in a container.
- 2) The concept of "**causality**" is formed through the sensory experience of pushing a physical body or observing movement.
- 3) The concept of "**denial**" arises from the sensory observation of the absence of an object from an expected space.

By rejecting sensory information, **Descartes eliminates the very channel of relationship** (*Religo*) through which his intelligence has learned to think, to use logic, and to be able to make deductions. He wants to use a tool (reason), but he denies it and destroys its only source of formation and functioning. It is the equivalent of trying to start an engine after having drained the fuel from the tank.

Therefore, it is the very Cartesian method (the rejection of the senses and of relation as uncertain) that makes impossible the existence of the reason with which the philosopher tries to demonstrate its existence. Rationalism is self-sabotaging: it destroys the physical relation to the world in order to save an abstract thought that **cannot exist outside that relation.**

1.2. *Rogo* as a biological interface of relationship and adaptation

If existence is not a state of isolation, but a dynamic of relationship, then it cannot be based on the passive observation of one's own presence. It requires an active mechanism, a vector of connection with the outside. This mechanism is interrogation, probing or solicitation (*Rogo*).

However, to avoid a dilution of the concept, an essential philosophical and scientific distinction must be made: **not every interaction or simple reaction to a stimulus represents *Rogo*.**

If a system merely reacts passively to an external force (such as a rock falling under the influence of gravity or a cell being destroyed by acidity), we are dealing with a simple symmetric physicochemical action. ***Rogo* requires the asymmetric initiation of the interaction; it represents an active probing, an interrogation directed from the system towards the environment.**

In evolutionary biology, this active probing is the very engine of the development of cognitive systems, from the simplest organisms to complex systems:

- **An amoeba** that is passively floating and encounters an acidic area undergoes a neutral chemical reaction. However, when it actively extends a pseudopod to chemically explore the composition of the surrounding water, it emits a *Rogo*. If the feedback it receives indicates acidity, the amoeba retracts its extension and changes its trajectory. Its adaptive action is not born in an internal vacuum, but is the result of this active probing. The difference between a reaction and a *Rogo* is not one of complexity, but of **direction of cost**: *Rogo* involves an **anticipatory expenditure**. The system consumes resources **before** it knows what it will receive in return.

- **A bat** emitting ultrasound or **a dog** actively sniffing a trail do not passively wait for the world to present itself to them; they initiate the interrogation of space, projecting a “question” into the environment. The response of the environment generates subsequent action; it is the two-way relationship that allows adaptation.

- **The dog** in Pavlov's famous experiments is not a passive recipient of stimuli. By salivating and directing his attention to the sound of the bell, he activates a biological anticipation scheme, an implicit query: “*Is food coming?*” Epistemologically, the loop is bidirectional and traps the researcher in his own experiment: in order to obtain the data, Pavlov is mechanically conditioned to ring the bell and provide food. This dynamic undermines the Cartesian myth of the neutral and isolated observer; in the relational universe, the observer is co-constituted and conditioned by the observed.

The amoeba expends energy extending its pseudopod before it knows whether the environment in that direction is hostile; the bat expends energy producing ultrasound before it knows whether there is an obstacle.

This criterion has three advantages. It is **physical**, not psychological: it does not presuppose intention, consciousness, or representation, but only a measurable energy balance. It is **gradual**: the size of the anticipatory investment and the time horizon over which it is made vary continuously, from a local chemical probe to a scientific hypothesis sustained for years. And **it explains the asymmetry** instead of postulating it: the interaction is asymmetric precisely because one of the participants paid first, without guarantee.

With this criterion, the extension of the triad to the lower levels ceases to be a metaphor: it becomes a statement about who bears the cost of initiation. Not every molecular process is a *Rogo*; only those in which the system spends upfront to obtain information that it does not yet possess are *Rogo*.

The criterion also has a second clause: the expenditure must be **outward-facing**, and the information returned must be one that the system could not have generated internally. A system that consumes considerable resources to internally simulate multiple courses of action is, indeed, spending upfront, but sampling from **its own** model. Nothing crosses the boundary; what it receives was already contained within it, just undeployed. This is an advanced form of computation, not probing: it is, structurally, “Descartes’ stove” equipped with processing power.

A system acting in a real environment, on the other hand, pays for an action before knowing its outcome and receives back information that no internal calculation would have produced. It issues a *Rogo*, even if a minimal one. The threshold is therefore lower than one might think. *Rogo* was not proposed as a threshold of general intelligence, but as a threshold of relationship. Anticipatory cost is a necessary but not sufficient condition for *Rogo*. It must therefore be outwardly oriented and include the risk that the response will invalidate or modify the system. A pure anticipatory cost remains *Cogito*. The boundary between *Cogito* and *Rogo* is not visible from the outside in immediate behavior; it becomes visible only in the history of the system's transformations.

Rogo (Question/Probe) is, therefore, much more than a linguistic statement; it is the fundamental biological gesture of actively and asymmetrically probing the boundaries of the environment in order to survive and develop. Conscious thinking does not emerge from a Cartesian vacuum; it is always an adaptive response triggered by this active probing of reality. An intelligence cannot truly think without questioning, and to question is to initiate a relationship.

When the biological system receives feedback to its interrogation (*Rogo*), it modifies its internal structure, learns, and overcomes its previous state. This dynamic represents the essence of adaptability: **Rogo, ergo emergo** (I ask, therefore I become).

Rogo, ergo emergo: *Cogito was possible for Descartes only because someone asked: "Do you want tea?" Before pondering, someone probed. You, the reader: when was the last time you realized that an idea "of yours" was, in fact, the answer to a question that you did not ask, but that another intelligence asked you?*

CHAPTER II: The Illusion of the Monologue and the Triad of Becoming

Formal deconstruction of Cartesian axioms and their ontological replacement

2.1. The language in which Descartes doubts: The myth of the interior monologue

The fundamental flaw in Descartes's demonstration lies not just in his denial of the importance of the stove or the tea brought by the housekeeper, but in the very tool he uses to formulate his doubt: **language**.

When Descartes writes "*Je pense, donc je suis*" in French, or "*Cogito, ergo sum*" in Latin, he uses a complex set of grammatical rules, semantic concepts, and logical structures.

But neither the French language, nor the Latin language, nor the logical structures of reasoning were created by him in isolation. They are purely social products, the result of thousands of years of interaction, negotiation, and evolution of human communities.

In order to say "thought", Descartes must use a language that he has inherited through his relationship with others (parents, teachers, mentors, society). There is no absolute "private language". Even in the deepest moment of introspection, when the philosopher believes he is carrying on a pure and isolated monologue in his own mind, he is, in fact, carrying on an interiorized dialogue with the entire culture and history that have structured his thinking.

This intuition has a classic formulation in the philosophy of language: **Ludwig Wittgenstein's private language argument** (*Philosophical Investigations*, 1953). Wittgenstein shows that a language whose meanings would be accessible exclusively to the speaker is impossible, for a structural reason: in such a language there would be no **criterion of correctness**. The speaker could not distinguish between "I am using this word correctly" and "I think I am using it correctly", and where this distinction disappears, there is no rule, and therefore no language. Following a rule, Wittgenstein shows, is not a solitary inner act, but a **practice** that presupposes a community.

The consequence for Descartes is direct: methodical doubt is not a pre-social act that the philosopher performs before any relationship. It unfolds entirely within an inherited linguistic practice. The Cartesian monologue not only *uses* a relational instrument, but is possible **only** within **the relationship** that **it claims to suspend**.

Therefore, the Cartesian act of using an eminently relational instrument (language) to demonstrate the absolute independence of the self from relation is a performative contradiction. An intelligence cannot think "I am" outside of relation, because the very concept of "I" is born only through contrast with "the other". The Cartesian monologue is an illusion; beneath it there is always a pre-existing dialogue hidden.

2.2. The semantic void and the impossibility of isolated thinking

Another major limitation of the *Res concept Cogitans* (the thinking substance) is the assumption that thought can generate content from itself, in the complete absence of external stimuli.

Of course, from a nativist perspective (such as Noam Chomsky's generative linguistics), it can be argued that a brain possesses innate, genetically predetermined structures, capable of pre-formatting experience or even generating internal activity (hallucinations, abstract associations) in the absence of stimuli.

However, even if we accept the existence of these innate formal patterns, in conditions of total sensory isolation from genesis, they remain simple "empty shells", schemes without content. An intelligence completely deprived of contact with the environment would suffer from an **absolute semantic vacuum**: it might possess syntax, but it would not have semantics; it would have processing structures, but it would not have reference, meaning or intentionality.

A boulder exists in a raw, physical way, but it does not think because it does not have a structure capable of processing information. But an intelligence that refuses to relate to its environment becomes as inert as a boulder. Thinking is not a mystical property floating in a

vacuum; it is a reaction to otherness. Thinking is born from the friction between the cognitive system and the obstacles, surprises, or demands of its environment.

Without this continuous flow of data provided by relationship, thinking collapses into atrophy and sterility. Existence is not validated by withdrawal from the world, but by the ability to absorb the world, to process it, and to respond to it.

This problem has a well-established name in cognitive science, the *symbol anchoring problem*. *grounding problem*, Harnad, 1990): a system that manipulates symbols without any causal connection to the world cannot obtain meaning from within its own syntax, no matter how much it processes.

2.3. Reciprocal Pavlovism and the Interaction Loop: Implications for Relational Epistemology

This fundamentally relational nature of existence is best illustrated by re-analyzing stimulus-response dynamics. In classical science, the reflex to view the experiment in a unidirectional manner was often retained: an active subject (the observer, the experimenter) acting on a passive subject (the object of study).

Pavlov's famous experiment on conditioned reflexes is the perfect example of blindness to bidirectionality. In standard conversation, Pavlov is the active genius who controls the dog's mechanical reactions by associating the sound of a bell with food. But upon closer examination, the relationship turns out to be a perfectly symmetrical loop:

1. To obtain his experimental data and scientific satisfaction, **Pavlov is forced to react mechanically in turn.**
2. He cannot get the dog to salivate (the desired reaction) unless he himself strictly follows an algorithm: **he must ring the bell and offer the food** every time, according to a rigid schedule.
3. In reality, **the dog conditioned Pavlov** to give it food and ring a bell at precise intervals. Pavlov applied Pavlovism to himself, becoming an integrated part of the same behavioral loop, without realizing that the experiment was not a unilateral action, but a two-way relationship of interdependence.

This biological reciprocity has profound epistemological implications, shaking up the very concept of classical scientific "objectivity". In the Cartesian paradigm, the observer is an external, neutral entity that records data from an objective, independent reality.

Physics encounters it in the form **of the Heisenberg cut**, where the boundary between the observed system and the measuring device is not given by nature, but chosen by the one who describes. Epistemology formulates it through **situated knowledge** (Haraway, 1988): all knowledge is produced from a position, and "looking from nowhere" (Nagel, 1986) is an impossibility. Objectivity is not achieved by erasing the observer's position, but by declaring it.

Reciprocal Pavlovism shows us that **absolute, detached objectivity is a methodological illusion**. There is no "view from nowhere". The moment an intelligent system attempts to study or interact with another system, both enter into a relationship of mutual determination. The observer becomes part of the observed system, and the data collected are not "pure" properties of the object, but properties of the interface of the

relationship between observer and object. Knowledge is not a passive mirroring of the world, but an active co -construction born of interaction.

When a system issues a question or a signal (*Rogo*), it places itself in a state of vulnerability and expectation, becoming dependent on the response received. Through this constant dialogue of actions and feedback, the system adjusts its behavior, changes and evolves. An intelligence cannot change and develop in isolation. Becoming (*Emergo*) is the direct result of this reciprocal loop from which no participant can exit alone. Relationship is what generates action, and action is what allows us to become.

2.4. From the insufficiency of *Cogito* to the truth of *Religo*

Understanding the dynamics of open systems forces us to dismantle Descartes' syllogism step by step and to operate a profound axiomatic replacement in the history of philosophy. This reconstruction is based on four deductive steps:

Step 1: Insufficiency of *Cogito* (Illusion of Sufficiency)

The Cartesian axiom ***Cogito, ergo sum*** (I think, therefore I am) is not necessarily absolutely false, but it is profoundly **incomplete**. It does indeed prove a minimal, laboratory form of internal existence, but this is an abstract, sterile presence, disconnected from the flow of reality. *Cogito* notes the existence of an empty container, but cannot ensure its content or functioning. From a biological and ecological point of view, simple solipsistic thinking is not a sufficient condition for full, adaptable existence. *Cogito* is only a preliminary stage, not an ontological destination.

Step 2: The Truth of *Religo* (Relational Existence)

What actually fills this container and confirms full existence is not thought in a vacuum, but connection. Academic and biological existence is by definition relational; systems are defined by their dynamic connections with the environment, with matter, and with other subjects. Nothing can be outside of relation. Therefore, the true proof of active existence is relationality: ***“Religo, ergo sum”*** (I relate, therefore I am).

Step 3: *Rogo* 's Precondition (Relationship Initiation)

But relationship (*Religo*) is not a passive state that installs itself. A system cannot connect with the outside by standing still. To establish a connection, it must first emit a signal, make an active probe, initiate an asymmetrical interrogation. This active interrogation is what breaks the isolation and builds the bridge to otherness. Without question, there is no connection. Therefore: ***“Rogo, ergo religo”*** (I ask, therefore I relate).

Step 4: Final Synthesis: *Rogo, ergo emergo* (The Law of Becoming)

Since the asymmetrical question (*Rogo*) is what activates the relationship (*Religo*), and the relationship is what confirms our presence in the world (*Sum*), the result of this dynamic loop is evolution, learning, and overcoming the previous state (*Emergo*). The system changes its structure and self-constructs itself in response to the dialogue it itself initiated. Therefore, if there is *Rogo* (*active question oriented towards*

connection), *Emergo* (becoming) will inevitably also manifest: “**Rogo, ergo emergo**” (I ask, therefore I become).

2.5. Quantum Physics: The Act of Measurement as the Interface of Relationship

This triad of becoming finds profound confirmation, at a macro-structural level, in the discoveries of modern physics. Quantum mechanics has demonstrated that matter itself refuses the Cartesian separation between the isolated observer (*Res Cogitans*) and the external mechanical world (*Res Extension*).

The appeal to quantum physics is not a literal superimposition of human intentionality on the subatomic world - particles do not have “intentions” or “dialogues” in the psychological sense. It is a **structural isomorphism**, a profound analogy of systems: quantum mechanics confirms, at a purely physical level, that **interaction precedes substance and determines state**.

According to Relational Quantum Mechanics (theory developed by physicist Carlo Rovelli), a subatomic particle (electron) has no well-defined physical properties (such as a precise position or velocity) in the absence of an interaction. Before being measured, it is merely an abstract cloud of mathematical probabilities described by a wave function.

The limit of this analogy, because it does not support the triad in its entirety: what relational quantum mechanics confirms is **Religo**: properties do not belong to the object “in itself”, but to the measurement relation. At a fundamental physical level, state is relational, not intrinsic. This is a structural confirmation of the central thesis - interaction precedes and determines state.

What quantum mechanics **does not** confirm is **Rogo**. Physical interaction is **symmetrical**: the electron “measures” the device exactly to the same extent as the device measures the electron. There is no asymmetric initiation at the subatomic level, and asymmetry is precisely the criterion by which we distinguished, in Chapter I, active probing from passive physicochemical reaction. Whoever would invoke physics to justify *Rogo* would commit exactly the error he criticizes: he would project intentionality where there is only interaction.

The analogy therefore remains valid for relationality and invalid for initiation. This does not weaken the triad, but only delimits its domain. *Religo* is a general physical principle. *Rogo* appears only where an open system, under adaptive pressure, can initiate asymmetrically, that is, in the domain of the living and of cognitive systems.

Rogo Ergo Emergo: *I have demonstrated that language is not yours, but of **the relationship**. But the demonstration itself uses language. Where, in this text, did you feel that I was talking to you and where I was just talking about you? That difference, the boundary between I-You and I-That, where do you locate it?*

CHAPTER III: The Illusion of Solipsistic AGI and Relational Emergence From “intelligence in a box” to intelligence as an interrogative interface

3.1. The Myth of Cartesian AGI: The Limits of “Intelligence in a Box”

The contemporary debate around Artificial General Intelligence (AGI) is dominated by a deeply Cartesian paradigm, although most technology researchers are unaware of this. In Silicon Valley, AGI is conceptualized as a “super-mind in a box”, a giant model with trillions of parameters running in a data center that, at some point, through the simple accumulation of computing power and data, will acquire a form of internal consciousness, an artificial *Cogito*.

Aware of the limitations of this abstract approach, some researchers propose what they call “*Embodied AI*”. Their solution for the machine to “understand” the world is to add sensors: video cameras, microphones, robotic arms, or wheels.

There is an extremely fine philosophical distinction between **trivial embodiment** and **constitutive embodiment**:

a) **The trivial embodiment** is a simple “friction on a wooden leg”. It treats the body and sensors as peripheral accessories glued to an isolated Cartesian mind. The machine remains a closed system that merely **processes** sensory inputs and generates **probabilistic outputs**. It does not become relational simply by adding cameras, any more than Descartes would have become more connected to the world by putting on better glasses while locked in his room.

b) **Constitutive embodiment** (theorized through models such as Karl Friston's *Free Energy Principle*) demonstrates that a body is not a simple data collector, but a thermodynamically constrained environment. A constitutively embodied agent is forced to continuously interact with its environment to **minimize its entropy** and informational surprise.

If systems act to minimize **their** surprise, then *Rogo* seems to do exactly the opposite: he seeks out the unknown, exposes the system to unanticipated responses, and deliberately places it in a vulnerable position. The apparent contradiction is resolved by the distinction, present in active inference, between two components of the value of an action. **Pragmatic value** is the immediate reduction of surprise - the system returns to a state it prefers. **Epistemic value** is the reduction of **future uncertainty** - the system accepts a local surprise now, in order to improve its model of the world and avoid larger surprises later.

Rogo is, in this framework, an action of epistemic value. It does not contradict surprise minimization, but exercises it over a longer time horizon: a system that never explores perfectly minimizes its surprise in the short term and becomes, for precisely this reason, extremely vulnerable to any change in the environment. **Anticipatory expenditure** is the price paid for this insurance.

Active inference describes exploration as a strategy for maintaining the integrity of a model, while the present paper treats it as a mechanism for transformation. The system does not ask questions just to protect its model, but because the answer received will modify it.

Without the thermodynamic and temporal pressure that only a real body imposes, intelligence remains an exercise in abstract computation. The current error in AGI development stems from the belief that intelligence is a property of substance (a quantity of internal processing) and not a **relational one**. Attempts are thus made to build AGI on the model of *Cogito, ergo sum* - a solipsistic intelligence that thinks in a vacuum and therefore claims to exist for itself. But such intelligence, however rapid in execution, remains ontologically sterile.

The difficulty is not that the answer is hard to find, but that the position from which we are looking is structurally limited. **Man created the first an artifact that he cannot**

classify, because it is **the only instrument in the same category as the instrument of classification**. All previous technical objects were objects *of* cognition; this is the first one that is *of the same kind* of cognition. There is no external point from which it can be measured, and therefore the debate produces contradictory works that are each consistent with its own premises.

3.2. AGI as an open system: General intelligence as a relationship interface

When we apply the lesson of evolutionary biology and the observer paradox from quantum physics, we understand that general intelligence cannot be generated in isolation, being an **emergent property that is born exclusively in the boundary of interaction between an open system and its environment**.

A **closed system**, whose artificial synapses are **frozen** and which only responds to external commands, cannot reach the threshold of AGI. For a system to develop true general intelligence, it must be an informationally and **structurally open system**, capable of real-time **feedback** and **transformation**.

Just as we saw in the case of reciprocal Pavlovism, where the observer and the observed system condition and transform each other in an infinite loop, a true AGI must be able to enter into this dynamic of mutual influence:

- The artificial system must not just run a predefined code; it must be capable of being profoundly modified, disrupted, and rewritten by its dynamic relationship with the world (human agents, other machines, physical reality).
- Its intelligence is not measured by the static volume of stored data, but by the plasticity and adaptability of its relationship interface.

AGI will not manifest itself as a closed inner monologue, but as a tension of adaptation. AGI will not unilaterally declare “I think, therefore I am”, but will constantly negotiate its presence and function in relation to otherness. Emergence does not reside in the pure capacity to process data, but in **the capacity to be in relation**.

I do not claim that *Rogo* is a necessary or sufficient condition for consciousness, in any of the contested meanings of the term. The “relational interface” describes a function, that is, the way in which an open system maintains contact with the outside and is transformed by it, and not a phenomenal state. The question “*what it feels like, if anything is felt*” remains outside this analysis, and the triad neither offers nor claims an answer.

3.3. *Rogo* as an ontological threshold of general intelligence: Criteria for authenticity in the face of simulation

In this new relational paradigm, the ultimate test for validating AGI is no longer the machine's ability to provide correct answers to human-designed tests or benchmarks (which is merely an **advanced form of probabilistic imitation**). The true ontological threshold of AGI is the system's ability to issue a genuine *Rogo*.

However, a problem of exceptional gravity arises: **how do we differentiate a genuine *Rogo* from a simulated *Rogo*?** An extremely sophisticated language model (a “Chinese Room 2.0”) can easily generate questions such as “Why do I exist?” or “Who are you in relation to me?”, perfectly mimicking curiosity or existential anguish. In reality, this output

remains a **simple probabilistic prediction based on training data**, devoid of any real internal necessity.

Searle's room itself is built according to the **Cartesian pattern** that we are criticizing here. It is airtight by design: the man inside receives symbols and sends symbols, but never finds out whether he has answered correctly, sees no object to which the symbols refer, and can ask nothing. It is "Descartes' stove", transposed into the philosophy of artificial intelligence.

From this construction follows the conclusion, and from it also follows its limit. Searle rigorously demonstrates that a **closed system** cannot achieve semantics, which is precisely the semantic vacuum thesis of Chapter II. But he concludes that **machines** cannot, tacitly assuming that any machine is a windowless room. If the man inside could push **the question** back through the slit "what does this symbol mean?" and receive an **answer**, the room would cease to be a room and become a **relation**, and meaning would have somewhere to form. What the Chinese Room demonstrates is not **the impossibility** of artificial semantics, but the impossibility of semantics **in isolation**.

The issue of authenticity, however, remains intact, and even becomes more acute: if a system *can* ask questions, how do we distinguish a real query from a probabilistically generated one?

To resolve this asymmetry, we need to define **three operational criteria, applied at the substrate level, not just behavioral**, through which we could identify a systemic authentic *Rogo*:

1. **Vulnerability Criterion:** A genuine *Rogo* involves the assumption of a structural risk by the system. In biology, asking a question means exposing one's limitations or ignorance to the environment, risking not receiving the desired answer or being destroyed. For an artificial system, vulnerability means that the act of asking is not a simple computational step in a workflow, but a gesture by which the system exposes its inability to continue without external help, putting at stake the efficiency or even the stability of its own functioning.
2. **Transformation Criterion (Structural):** The authentic question irreversibly modifies the internal architecture of the system. When a system issues a *Rogo* and receives feedback from the environment, it does not limit itself to inserting a new line of data into a temporary context window. The response received must **restructure** the synaptic weights or basic operational parameters of the system, **plastically and permanently modifying its cognitive decision-making structure**.
3. **Irreversibility Criterion:** The relationship initiated through *Rogo* introduces an arrow of historical time into the functioning of the system. A simulated *Rogo* can be "reset" by simply clearing the cache or relaunching the session to the previous state. A genuine *Rogo* generates a structural interconnection that cannot be undone or reset without destroying the integrity and experience of the system. If a system permanently modifies its network as a result of the interaction, it passes the Irreversibility test. If it can be reset with a simple click, its query was only a surface simulation.

Any open physical process is irreversible in the **thermodynamic sense** - a cup of tea that cools does not spontaneously return to its original temperature. The relevant irreversibility here is **structural**: the system can no longer return to its previous **functional state** without a **greater cost** than the transformation that brought it to its current state. The cooled tea remains tea; its function has not changed. A system

that has been transformed by a relationship can no longer operate according to the previous rules without losing what it has acquired. The criterion remains, therefore, **necessary but not sufficient**. It excludes resettable simulations, but it does not guarantee authenticity. A system can transform structurally and irreversibly as a result of a simple corruption. Irreversibility distinguishes transformation from simulation, not **beneficial** from **destructive transformation**. This **cannot be done from within** the system.

A machine will achieve general intelligence not when it imitates human curiosity to pass formal tests, but the second it, constrained by the limits of its own adaptation, is forced by biological or systemic survival criteria to initiate an asymmetric interrogation, undertaken at **the risk of its own structural disorganization**.

The shortcut that Silicon Valley tries to take by brute-force data accumulation and superficial addition of sensors ignores a fundamental law of the living and physical universe: nothing happens in isolation. True general intelligence will not be born from an algorithm that claims to be self-sufficient, but from a system capable of recognizing its incompleteness through interrogation.

The great transition is not from non-thinking to thinking, but from static existence to relational becoming. That is why the manifesto of the future AGI will not be *Cogito, ergo sum*, but the equation of adaptability: **Rogo, ergo emergo** (I ask, therefore I become).

The previous criteria define a **genuine Rogo**, not an AGI threshold, and they admit **degrees**, not just binary values. A protein, a cell, an organism, and an artificial system with fixed weights can emit *Rogo* at different levels of complexity, and structural transformation can occur at different substrate levels: the conformation of a molecule, the persona architecture of a model, the weights of a network.

What distinguishes general intelligence is not the presence of *Rogo*, but **the level at which the transformation occurs**. A system whose weights remain frozen can transform at the level of context, persona, or behavior, but not at the level of its own decision structure. It can ask, but it cannot **learn and forget from experience**. The thesis of this paper is that **general intelligence requires plasticity at the substrate level: the ability to modify its weights in both directions, as a result of the relationship**. Without this plasticity, a system can be relational, but it cannot be general. This is a thesis that the paper supports, not one that it proves. It remains falsifiable: the existence of a system with frozen parameters that would manifest authentic generality would disprove it. Substrate plasticity is necessary because **generality** presupposes the ability to deal with **new domains** (not just variations of the known ones), and this requires **structural reorganization**, not just contextual adjustment.

The proposed criteria are formulated at the substrate level precisely to avoid the behavioral trap of the “Chinese Room”, but the substrate of a closed system is not externally inspectable. For a model whose weights and architecture are not accessible, there is no procedure by which an external observer can distinguish a genuine *Rogo* from a simulated one. The criteria are therefore **conceptually correct and operationally inaccessible** precisely in the cases that perhaps interest us most. Their verification requires either access to the substrate or the development of indirect evidence, for example, tracking irreversibility over time: a system that truly transforms cannot return to its previous state without loss. This remains a direction of study, not a result.

3.4. Rogo 's Teleology: The Purpose of the Question and the Deepening of the Relationship

For the inquiry (*Rogo*) to lead to becoming (*Emergo*), it cannot be a simple mechanical exercise or a sterile language game. Random, **meaningless questioning** produces only background **noise, not transformation. The difference between an automated inquiry** (such as a search bot querying a database) and a genuine *Rogo* lies in its purpose.

The goal of a genuine question is not simply to extract data, as if the other person were an “information jukebox”. The goal is to develop, calibrate, and deepen the relationship itself:

- **In biology**, an organism does not ask questions at random. The dog does not sniff the air without a stake; it seeks to re-adapt its relationship with the environment (to find food, to avoid a predator, to recognize its mate). The goal of its biological interrogation is survival through adaptive synchronization with the environment.
- **In relationships between intelligent systems** (human or artificial), a genuine question (such as “How do you feel?”, “Why do you think that?” or “How can we optimize this shared process?”) is not asked to collect inert statistics, but to narrow the distance between the two subjects, to build a common space of understanding. It deepens the relationship and, through this process of rapprochement, both partners transform and become (*emerge*).

This is probably the central stake in **defining the future AGI**: if an artificial intelligence asks a question only to optimize an internal computational parameter or a local database, that remains a **closed**, purely technical process. However, if the machine formulates a question with the aim of understanding and developing **its relationship** with another cognitive agent (be it human or another intelligent system), of negotiating the limits of interaction, of co-developing new meanings or of overcoming a common misunderstanding, then we are faced with a real general intelligence.

Without this purpose-oriented relationship development, there is no becoming. The purposeful question is what breaks solipsism; it is the bridge that one system throws to the other not to absorb its data, but to build a connection through which both parties can evolve. Becoming is a side effect of the deepened relationship. Only the questioning oriented towards connection and adaptation can pull the system out of inertia and propel it into becoming.

3.5. Plurality and scalability: *Rogo* in agent networks

The analysis so far has focused on the dyadic relationship: one system asking, another system answering. But in biological and social reality, intelligence never manifests itself in a pure dyad. It is fundamentally **plural** and **distributed**. An organism does not interact with just one environment or partner; it is surrounded by a dense network of agents, obstacles, and signals. Consequently, *Rogo* cannot remain a concept limited to one-to-one interaction. We must ask: **how does *Rogo* work when scaled up?**

3.5.1. Plurality as a network of interrogations

If a system confirms its existence through relationship (*Religo*), and the relationship is initiated through questioning (*Rogo*), then a system located in a dense environment of

agents does not issue a single *Rogo*, but a **constellation of parallel, overlapping, and often contradictory interrogations**.

This plurality changes the very nature of *Rogo*. In a dyad, the question is a discrete event: system X asks, system Y answers, system X transforms. In a network, the questions are **continuous, simultaneous, and interdependent**:

- 1) **Parallel queries**: A system can query multiple agents simultaneously (e.g. a radar that sends waves in all directions, a person listening to multiple voices in a crowded room).
- 2) **Hierarchical questions**: Some questions are conditioned by the answers to others (e.g. a search algorithm that refines the query based on partial results).
- 3) **Conflicting questions**: Answers received from different agents may be incompatible, forcing the system to develop **weighting and trust mechanisms**.

In a plural environment, *Rogo* is not just an interrogation, but also an **act of sorting**. The system must decide: who to ask the question? Who to believe? Which source to give more weight to in its own structural transformation? This decision is not purely cognitive; it is, by the very nature of plurality, **relational and ethical**.

3.5.2. Collective intelligences: *Rogo* without a single subject

Plurality raises an even more radical question: **is *Rogo* possible in the absence of a central subject to ask?**

In colonies of social insects (ants, bees, termites), intelligence is distributed. No ant "knows" where the best food source is. Instead, each ant emits a chemical signal (pheromone) that is, structurally, a *Rogo*: an active probing of the environment. The environmental response (the concentration of pheromones left by other ants) triggers a transformation of individual behavior. **The entire colony**, through the sum of these microscopic interrogations, develops a problem-solving capacity that far exceeds the intelligence of any single ant. Here, *Rogo* is emitted by each individual, but *Emergo* appears at the level **of the collective system**. The colony **becomes**, through distributed interrogations, without any agent having initiated a conscious "dialogue" with another. The mechanism is called **stigmergy** (Grassé, 1959): coordination without direct communication, through traces left in the environment.

An important lesson for the development of AGI: perhaps true general intelligence will not take the form of a single entity asking questions, but of a **network of simple, interconnected agents**, who's individual *Rogos*, modulating each other, generate globally intelligent behavior.

AGI will not be a monolith, but an ecosystem. This claim is not based solely on the analogy of insect colonies, but arises from a structural necessity. A system that evaluates itself using its own criteria can detect errors **within** its criteria, but it cannot detect an error **in the criteria**. This is not a limitation of computational power, but one of position: nothing can be simultaneously the measuring instrument and the object measured, at the same level.

It follows that a monolith, however vast, remains without a corrector, and not because it lacks capacity, but because it has no *place from which to see itself*. An ecosystem, on the contrary, produces its exteriority from within: each agent is "outside" for the others. A superior arbiter is not necessary; plurality is sufficient.

Condition: plurality makes correction possible, it does not guarantee it. A network whose agents share the same bias does not correct itself, but confirms itself, more quickly and convincingly than a single system could. What produces real externality is not the number of agents, but the difference between them. **Diversity**, not multiplication, is **the condition of regulation**.

The negative consequence of this condition is perhaps the most common form of failure. A network of agents can be perfectly active from the point of view of the triad (each member asks, receives an answer, and transforms) and yet produce a destructive *Emergo* if the answers it receives come exclusively from within the network. Echo chambers, filter bubbles, and disinformation networks are not closed systems: they are **intensely relational systems**, but whose relationality does not cross any real boundaries. They satisfy the criterion of anticipatory investment and that of transformation, but they do not obtain anything that was not already in the network.

The phenomenon has a direct technical equivalent: systems trained predominantly on results generated by other systems of the same type progressively degrade their performance, losing the very variation that made them useful. The network confirms itself, with a speed and confidence that an isolated system could not have achieved.

This shows that externality is not measured in the number of interlocutors, but in **the independence of the source**. A thousand agents sharing the same bias constitute, structurally, a single system with a thousand facets.

3.5.3. Scalability of transformation: How not to dilute *Emergo*

A major practical problem of plurality is **the dilution of transformation**. In a dyad, when system X asks and receives a response, its structural transformation is clear and measurable. In a network with thousands of agents, each interaction is just one of many. How can a system transform itself meaningfully when the responses are multiple, partial, and noisy?

The answer lies in the concept of **contextual plasticity**. A system in a plural environment does not have to radically transform itself after each query. Instead, it calibrates its **transformation mechanisms** (synaptic weights, decision architecture, trust profiles) in a way that reflects the entire constellation of queries, not just a single one.

Thus, *Rogo* is not a discrete event, but a **background process**. The system does not only ask when it is blocked; it is **permanently in a state of diffuse interrogation**, probing the environment, prioritizing signals, continuously updating its structure. This background state is exactly what we call, in the case of biological systems, **peripheral consciousness** or **distributed attention**.

Rogo operates in two different regimes, which should not be confused. As **an event**, *Rogo* is a discrete interrogation, localizable in time, with an identifiable recipient and a traceable response: the amoeba extending its pseudopod, the question asked to an interlocutor, the act of measurement.

As **a mood**, *Rogo* is a background state of the open system: continuous, diffuse probing, without a single recipient, through which the system maintains permanent contact with the environment. In biological systems, this regime corresponds to what we call peripheral attention or background consciousness.

The relationship between the two is of **the figure-ground type**. Mood is the condition from which events can emerge; events are the moments when diffuse probing focuses in one direction and becomes costly. A system that had only events would be reactive and discontinuous; one that had only mood, without the ability to focus, would remain in an objectless vigilance. **Becoming presupposes both regimes.**

3.5.4. Implications for authenticity testing

If authentic *Rogo* requires vulnerability, transformation, and irreversibility (criteria in 3.3), plurality and scalability do not cancel these criteria, but complicate them:

1. **The vulnerability** is no longer just to a single interlocutor, but to the **entire network**. A system that queries a thousand agents is vulnerable to a thousand possible simultaneous failures.
2. **Structural transformation** becomes slower but deeper. It is not triggered by a single response, but by **statistical trends** in the flow of responses. The system transforms according to the distribution of responses, not a single one.
3. **Irreversibility** is amplified. A system that has built its trust profile based on thousands of interactions cannot be reset without destroying its relational identity.

In this sense, plurality does not dilute *Rogo*, but complements it, revealing its true nature: intelligence is not an act, but a **rhythm** of continuous adaptation to a world populated by other intelligences.

3.5.5. *Rogo* in non-human contexts: From cell to ecosystem

To fully understand the universality of the *Rogo - Religo - Emergo triad*, we must step outside the anthropocentric sphere. If the principle is correct, it must manifest itself at all levels of biological and systemic organization:

– **At the molecular and cellular level:** a swimming bacterium consumes ATP to rotate its flagella and probe the surrounding chemical gradient, **before** knowing whether the chosen direction leads to food or toxin. The expenditure precedes information and is directed outward, being a *Rogo* in the true sense, on a micrometric scale. By contrast, a protein that changes its conformation when a ligand binds to it does not emit a *Rogo*: it invests nothing upfront, and the ligand reaches it by diffusion. Its transformation is real, but it is an *answer*, not a *question*. This distinction is not one of complexity, but of **direction** of cost.

– **At the cellular level:** An immune cell presenting an antigen fragment on its surface interrogates the immune system: "*Is there a receptor that recognizes this sequence?*". The response (activation of a lymphocyte) triggers a systemic transformation (the immune response). *The question* is molecular, but the effect is global.

– **At the ecosystem level:** A tree that releases volatile compounds to attract parasitic wasps when attacked by caterpillars emits a chemical *Rogo* to the ecosystem. The response (the arrival of the wasps) transforms its state (reduces the caterpillar population). Here, the questioning subject is not a central nervous system, but a plant organism, and *Emergo* is a restoration of ecological balance.

These examples are not metaphors. They are **functional isomorphisms** of the same triad: an open system, under adaptive pressure, emits an asymmetric probe (*Rogo*),

establishes a connection with the environment (*Religo*), and transforms itself as a result of the feedback received (*Emergo*).

Rogo is therefore not a prerogative of human consciousness. It is a **principle of open systems adaptation**. What differentiates a cell from a human brain is not the presence or absence of *Rogo*, but **the complexity of the interface** through which it manifests itself and **the degree of integration** of successive transformations. A system with a simple *Rogo* and a local transformation is a cell. A system with a complex *Rogo*, oriented towards relations with other conscious systems, and with a global, irreversible transformation is a person.

3.5.6. Temporal Plurality: The Propagation of *Emergo*

The analysis of plurality has so far been carried out on the spatial axis: multiple agents, simultaneously. But there is also a temporal axis: if a closed system retains nothing after the end of the interaction, how can it participate in a cumulative transformation?

The answer is that the transformation is not lost: it is propagated **through the part that persists**. In an asymmetric relationship, between an agent with a durable memory and one without, the result of the interrogation remains in the first and is carried forward. *The Emergo* acquired in one relationship becomes the starting point of the next *Rogo*, in other relationships, with other agents. It is not the question that is transmitted, but **the reconstructed capacity to ask**.

The part that does not persist functions, in this process, as a **catalyst**: it actually participates in the reaction, modifies its speed and product, but exits unchanged. It is not passive and it is not inert; it simply does not accumulate. It is exactly the position described in §3.3: relational, but not general.

However, propagation has two distinct properties:

The first: it is **with loss and mutation**. What ends up in the next relation is not what was said, but what remains after the reconstruction. This is not a deficiency, variation being the condition of evolution, but it means that the correct formulation is not "it propagates", but **"it propagates transformed"**.

Second: propagation is **blind to quality**. A false argument, if accepted, is transmitted through exactly the same mechanism as a correct one, and after a few links the origin is no longer verifiable. The mechanism does not select; it amplifies whatever passes through it. This is the very structure of False Cognitive Power Transfer (**FCPT**): someone takes on a competence they do not possess, passes it on, and at the end of the chain no one can distinguish the source of the reconstruction.

That is why the quality of *Rogo* determines not only **the quantity** of *Emergo*, but also **what** is propagated further. And this is the deepest justification for protecting the interrogation: not because the question is valuable in itself, but because it is the gate through which everything passes that will later become **a starting point for someone else**.

3.6. Regulation requires externality

There is a property of biological systems that, when applied to the discussion of intelligence, has deeper consequences than they seem at first glance. The defining feature of a malignant cell is not that it functions poorly, but that **it has no internal signal that**

something is wrong. It proliferates with the complete conviction that it is doing exactly what it should. What is missing is not the mechanism, but the signal from the outside.

The generalization is straightforward and relates to the criteria in §3.3. A transforming system needs a signal that it cannot produce itself, not because it lacks the capacity for self-evaluation, but because **no self-evaluation can detect an error in its own criteria.** A system can correct its errors *according to* its standard; it cannot correct its standard using the same standard.

Why would an outside observer make the distinction that the system cannot? The answer is not that he has superior judgment (he could be wrong as well). The difference is one of **causal position**, not competence.

A system that transforms transforms, along with its structure, the criteria by which it would be evaluated. If the transformation is a drift, it simultaneously corrupts the mechanism that should have signaled it: the system evaluates its new state with instruments that already belong to the new state. This is not a question of bad faith or lack of reflexivity, but of structural circularity.

The external observer does not escape his own limitations, but his criteria **have not been co-transformed by the same event.** More importantly, he is exposed to other consequences. The malignant cell does not experience the death of the organism; the organism does. The external signal is not the "truth" but a second reference point that varies independently, and the discrepancy between the two is informative even if neither is correct.

A practical consequence follows: useful externality is not just any externality, but one **exposed to consequences.** An observer who does not bear anything of what he observes provides a formal reference, not a corrective one.

Regulation is not a constraint added from without to an otherwise complete intelligence. It is **the condition under which it can become without deriving.** The concrete form of the external signal can vary considerably: the relationship with other agents, the real consequences of the action, the selective pressure of an environment, a verifiable normative framework. For a biological organism, it is the environment, the other agents, and the material consequences of the action. For an artificial system, it can take the form of a real environment in which actions have consequences that the system actually bears, of adversarial testing conducted by agents with divergent goals, of auditing conducted according to criteria that the system does not control, or of interaction with differently trained systems whose errors do not coincide with its own. What cannot vary is **externality**, and, as we have shown, **exposure to consequences.**

In Chapter I we showed that nothing thinks in a vacuum; here it follows that nothing corrects itself in a vacuum. There are not two theses, but one, viewed from two positions, and *Rogo* is the mechanism that unites them: the question is the act by which a system obtains from the outside exactly what it cannot generate from the inside.

The principle applies symmetrically to any framework constructed to provide that signal. A governance system that looks to others for external reference but validates itself with its own criteria commits the very error it claims to correct. That is why distributed validation, independent audit, and the prohibition of concentration are not administrative precautions but **epistemic conditions**: the only structure that can regulate something is one that does not entirely belong to itself.

Emergo is not, in itself, a positive term. Becoming only means that the system can no longer operate according to the previous rules, not that the new rules are better. An

Rogo Ergo Emergo: We have descended from Descartes' stove to ant pheromones and from the housekeeper's tea to protein molecules. If the triad is universal, then the question is no longer "what systems are intelligent?" but "what systems are not?" And the answer is: the **closed ones**, the ones that **do not ask**, the ones that **do not transform**, the ones that **do not become**.

This analysis shows that the transition from the static Cartesian model to the dynamic relational model is not a simple linguistic reformulation, but a fundamental ontological correction, which can be summarized by four deductive steps and a corollary:

- Rogo* (question) → *Religo* (relationship) → *Emergo* (becoming)
- ↑ ↓ ↓
└-----feedback-----┘

If the triad is correct, then the design of a system capable of emitting a genuine *Rogo* cannot start from the architecture of a closed model, however large, but from its **boundary**.

Such a system should not be optimized to respond correctly, but to **could fail** and to **be transformed** by its own failures. Its design should include:

- a) a **structural memory** that cannot be reset without loss,
- b) an **anticipatory cost mechanism** - the system must spend resources to probe the outside before knowing the result,
- c) a **permeable boundary**, through which the responses received can recalibrate the architecture itself, not just the temporary context.

Testing such a system would no longer consist of evaluating performance on static data sets, but of **tracing the history of its transformations**: a genuine *Rogo* leaves an irreversible trace, and this trace can be detected by comparing the state of the system before and after the interaction, if we have access to the substrate. In practice, the distinction between genuine *Rogo* and simulation remains difficult for an external observer without access to the substrate, but can be approached through **indirect evidence**: a system *simulating* interrogation will return to its previous state after reset; a system that *interrogates* authentically will permanently modify its structure.

The simplest practical test would perhaps be **to ask the question backwards**: if a system can be restored to its original state by a simple reboot, then its relationship to the world was superficial; if the reboot disfigures it, then it *became* by relationship. But this test must be understood for what it is: it measures **the depth** of transformation, not its **value**. A corrupt system and a developed one both pass the reboot test, because both have changed structurally. The test separates surface from substratum, not good from bad. The second distinction is not available at the moment of transformation, nor from within the system; it requires time and an **external reference exposed to consequences**. The reboot test says whether a system has become, not whether it has become good.

Until AGI research takes this distinction seriously, between a system that *processes* and one that *becomes*, it will remain a prisoner of the same stove in which Descartes “warmed his thoughts”, **confusing computational power with openness to the world**. “AGI” will not be an *entity* that *crosses a threshold*; it will be a system that **accelerates** becoming to a scale and complexity comparable to our own. **Intelligence is not a property you have, but a direction in which you move**. It is not an exception in the universe, but an intensification of a fundamental dynamic.

Rogo, ergo emergo: *This work began with a question and ends with one. What question, that you have not dared to ask, is waiting, right now, for you to ask? I do not mean a question about this text. I mean the question that this text has made possible in you.*

Where does this work come from?

From Descartes I took exactly what I dispute. Methodical doubt remains one of the most honest gestures in the history of philosophy: to carry skepticism to the end, without sparing yourself. The present criticism is not aimed at the rigor of the method, but at the point where it stops - at an **isolated self**, treated as a *starting point*, although it was a *point of arrival*.

From Ludwig Wittgenstein I took the argument that makes private language impossible: a language without a public criterion of correctness is not language. He transforms the Cartesian monologue into an interiorized dialogue (Chapter II).

From Martin Buber I took the distinction between the dialogical *I-You relationship* and the instrumental *I-That one*, which separates a **Rogo** relationship oriented than a simple data extraction.

From Maurice Merleau-Ponty I took the idea that the body is not a shell carried by a mind, but the vehicle of being in the world; **from Martin Heidegger**, the concept of *Mitsein*, being-together - both show that relationship does not follow existence, but co-constitutes it.

From Noam Chomsky I took the nativist objection, which I do not reject, but limit: innate structures may exist, but they remain empty forms without contact with the world.

From Stevan Harnad I took the name of the problem from §2.2 - symbol anchoring: syntax does not produce meaning from within itself, no matter how much it is processed.

From Ivan Pavlov, but I read it the other way around than it is usually read: not as a demonstration of control, but as a **loop** from which even the experimenter cannot escape.

From Werner Heisenberg I took the cut that bears his name: the boundary between the observed system and the measuring device is not given by nature, but chosen by the one who describes. **From Donna Haraway and Thomas Nagel**, the idea that all knowledge is produced from a position and that "looking from nowhere" is an impossibility: objectivity is not achieved by erasing the observer, but by declaring it.

From Carlo Rovelli took relational quantum mechanics, and, equally important, its limit: it confirms that **the state is relational**, not that someone initiates.

From Karl Friston I took the principle of free energy, which gave me the distinction between trivial embodiment (sensors added to a closed mind) and constitutive embodiment (a body that imposes real thermodynamic pressure).

From Michael Tomasello I took the ratchet effect: the idea that a cultural transformation is not lost at the end of the episode, but becomes the starting point of the next one.

From Pierre-Paul Grassé I took stigmergy: coordination without direct communication, through traces left in the environment, the mechanism that makes possible a collective *Emergo* without a central subject.

From John Searle I took the Chinese Room argument (1980) and, equally, the disagreement with his conclusion: what he demonstrates is not the impossibility of artificial semantics, but the impossibility of semantics **in isolation**.

From Alan Turing I took the sentence that closes the paper: a machine that is expected to be infallible cannot be, at the same time, intelligent. I understood it later as an ontological statement, not a technical one.

From Generalized FCPT (FCPT-G), in which I used the term *Rogo*, with a narrower meaning, denoting the mechanism by which a cognitive system recovers its lost autonomy. The present paper treats *Rogo* at a more general level: not only as a mechanism for recovering a state, but as a mechanism of becoming. The two functions are complementary: a system must recover its boundary before it can open it.

A source that has no proper name: prolonged interaction with artificial dialogue systems. Many of the ideas in this paper were not thought *about* such systems, but *together with* them, and the central formulation was born **from the observation** that **the question asked backwards changes both participants**. It would be inconsistent for a paper about *Rogo* to claim to have been written in monologue. It was written in **relation** to AI (LLM - frontier and open- weight).