

# The Generativity Question

## Why Predictive Track Records Cannot Evaluate Ontologies

**Project:** [Return to Consciousness](#)

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**Authorship Note:** Co-authored with AI as a disciplined thinking instrument—not a replacement for judgment. Prioritizes epistemic integrity and truth-seeking as a moral responsibility.

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### Abstract

A recurring critique of consciousness-first frameworks — often framed as pragmatic rather than partisan — is that they fail to “build” in the way successful sciences do. This essay argues that the critique rests on a category error with two dimensions: (1) crediting physicalism with explanatory achievements that belong to empirical methodology, not to any ontological claim; and (2) demanding that ontologies produce predictive track records, when prediction is the business of scientific theories — and scientific theories are ontologically portable. No scientific theory derives its predictions from the axiom that matter is fundamental. The demand for “idealist predictions” confuses the level at which ontologies operate. What ontologies actually do is expand or contract the **space of conceivable scientific theories** — the range of research directions, questions, and explanatory postures that a framework permits or forecloses. Physicalism contracts this space by ruling out consciousness-first research directions a priori. Idealism expands it by permitting everything physicalism permits plus directions physicalism forecloses. This is the correct criterion for evaluating ontologies — though the expanded space must ultimately be vindicated by the phenomena within it surviving rigorous empirical investigation. Applying this criterion does not guarantee any framework’s success. It ensures that evaluation operates on the right terrain.

**Keywords:** ontological evaluation · predictive track records · category error · scientific methodology · theory portability · idealism · physicalism · research generativity

### What This Essay Does and Does Not Establish

**This essay establishes:**

- That the explanatory achievements credited to physicalism (formal models, predictive cascades, intervention leverage) arise from empirical methodology, not from the ontological claim that matter is fundamental

- That the same methodology is ontologically portable — a scientist working under idealist assumptions can employ identical methods and reach identical quantitative conclusions
- That predictive track records are properties of scientific theories, not of ontologies — and that no scientific theory’s predictions depend on any particular ontological commitment
- That the correct criterion for evaluating ontologies is whether they expand or contract the space of conceivable scientific theories
- That physicalism contracts this space (foreclosing consciousness-first research directions) while idealism expands it (permitting everything physicalism permits, plus more)

**This essay does NOT establish:**

- That consciousness-first frameworks have already produced detailed mechanistic theories
- That the absence of mid-level bridge theories is merely a sociological artifact
- That idealism is correct or that physicalism fails
- That expanding the space of conceivable theories guarantees productive research in any direction

**The argument’s center of gravity** is the category error: methodology misattributed to ontology, and predictive track records demanded of ontologies when they belong to theories. If this error is real, then the most common “pragmatic” dismissal of consciousness-first work is operating on misconceived criteria — regardless of whether the work ultimately succeeds.

**Role within the project:** This essay is an *epistemic gatekeeper* — it corrects how readers evaluate downstream work before they encounter it. It presupposes the arguments in [Myth of Metaphysical Neutrality](#) (that hidden physicalism constrains inquiry) and [Asymmetric Methodological Restraint](#) (that skepticism is applied selectively). It does not depend on any downstream essay’s success. If the constraint-level work in [Anomalous Phenomena and Consciousness](#), [Consciousness Across Cultures](#), or [Biological Competency](#) proves unconvincing, this essay’s diagnosis of the evaluation standard remains intact.

## I. The Reasonable Critique

Critics of consciousness-first frameworks sometimes concede the epistemic arguments — that metaphysical neutrality is impossible, that skepticism is asymmetrically applied, that dismissal substitutes for explanation — while maintaining a separate objection:

“Granted, physicalism is not neutral. But it *works*. It generates models, predictions, interventions. Consciousness-first frameworks may diagnose problems, but they don’t build. Where is the idealist neuroscience? Where are the predictions?”

This objection sounds empirically grounded and non-partisan. It appeals to a standard that reasonable people share: explanatory frameworks should be evaluated by their capacity to generate productive research, not merely by their internal coherence.

The objection has real force. It should not be dismissed or psychologized. But it should be examined — because it contains a category error that, once made visible, dissolves its apparent force entirely.

## II. The First Dimension: Ontology Credited for Methodology

### What Science Actually Requires

The explanatory power of modern science arises from a specific methodology: quantitative analysis of reproducible patterns, mathematical formalization, controlled experiment, intersubjective verification. As *Return to Consciousness* and *The Emergence of Physicalism* document, this methodology was adopted as a *strategic restriction* by early modern scientists — a way to study nature without entering metaphysical disputes. Galileo, Descartes, and Newton practiced objective empiricism. They did not practice metaphysical materialism.

The strategic restriction worked brilliantly. But as the companion essays trace, methodological success was gradually conflated with ontological truth. “We study only measurable aspects of experience” became “Only measurable, material things exist.” The machinery that generates predictions — formal models, mathematical relationships, intervention leverage — belongs to the *method*, not to the *metaphysical claim* that reality is fundamentally physical.

### The Portability Test

This distinction is testable. Consider a scientist operating under idealist assumptions — where physical phenomena are stable patterns within consciousness, lawfully structured and intersubjectively accessible. Can this scientist:

- Formulate quantitative hypotheses? Yes.
- Design controlled experiments? Yes.
- Build predictive models? Yes.
- Develop interventions (pharmacological, surgical, technological)? Yes.

The predictive content of science transfers completely. What does not transfer is the metaphysical interpretation that the measured patterns constitute ontologically fundamental reality. A physicist calculating orbital mechanics reaches identical equations whether she treats mass as a property of mind-independent matter or as a regularity within structured experience. The math does not change. The predictions do not change. The engineering does not change.

This is the *empirical equivalence insight*: the generative machinery of science is ontologically portable. Crediting physicalism with that machinery is like crediting a particular map projection with the terrain it depicts. The terrain is real; the projection is a choice. This essay will call this the *map-projection error*: mistaking the representational success of a method for evidence about the ontology of what is represented.

Two clarifications are needed here.

First, portability does not imply that ontological commitments play no role in shaping research heuristics. They do — as *Myth of Metaphysical Neutrality* argues, background ontology shapes which questions get asked and which phenomena get taken seriously. Portability implies only that the predictive and explanatory success of scientific methods does not depend on the truth of the ontology that historically guided their deployment.

Second, a natural objection: if idealism permits top-down mental influences on physical processes, doesn't that violate the causal closure of the physical — and wouldn't that break the equations? Under analytic idealism, the answer is no — for a specific reason. Idealism does not introduce violations of physical law at the level where physics operates. It reinterprets what those regularities *are* (extrinsic appearances of mental processes), not whether they hold. All

conservation laws, all equations, all statistical distributions are preserved. Moreover, quantum field theory's own formalism contains a structural feature relevant here: the Born rule specifies the *probability distribution* of measurement outcomes but is silent on *which specific outcome actualizes* in any given case. This outcome-selection degree of freedom is not a gap in current knowledge awaiting better physics — it appears to be a structural feature of the formalism itself. Idealism does not need to violate any physical law to be causally operative; it operates within the space the physics leaves open. The statistical structure that science measures is fully preserved; what changes is the interpretation of what fills the undetermined degree of freedom — brute randomness (under physicalism) or the activity of consciousness (under idealism). The equations are portable because idealism preserves everything the equations describe.

### **What the First Dimension Reveals**

When a critic says “physicalism generates predictions; idealism doesn't,” they typically mean: “The scientific enterprise embedded in physicalist culture has generated predictions.” This is true. But it does not show that the predictions *depend on* the ontological claim that matter is fundamental. The predictions depend on mathematical formalism, empirical discipline, and accumulated methodological tradition — all of which are available to any ontology that accepts lawful regularity and intersubjective verification.

This dimension of the category error allows a *methodological* achievement to function as *ontological* evidence. If physicalism's success is really methodology's success, then comparing frameworks by “generative capacity” is comparing their methodological development, not their ontological adequacy. And methodological development is shaped by institutional investment, cultural attention, and time — not solely by a framework's intrinsic potential.

But the first dimension alone does not fully dissolve the objection. A critic might respond: “Fine — the predictions belong to methodology. But surely an ontology should eventually guide methodology toward *better* predictions. If idealism can't do this, what good is it?”

This response seems reasonable. It is not. It reveals the second dimension of the category error.

## **III. The Second Dimension: Predictive Track Records Are the Wrong Metric for Ontologies**

### **What Ontologies Do**

The demand that ontologies produce predictive track records confuses two categorically different levels of intellectual work.

**Scientific theories** generate predictions. Quantum electrodynamics predicts the anomalous magnetic moment of the electron to twelve decimal places. General relativity predicts gravitational lensing. Molecular biology predicts protein folding. These are extraordinary achievements. They belong to *theories* — specific mathematical and empirical frameworks that model particular domains.

**Ontologies** do not generate predictions. No prediction in physics follows from the axiom “reality is fundamentally physical.” No prediction in neuroscience follows from the axiom “consciousness is produced by matter.” The predictions follow from the *theories* — from Schrödinger's equation, from the Standard Model, from connectionist architectures — and these theories are ontologically portable. A physicist who treats wavefunctions as patterns within

consciousness reaches the same predictions as one who treats them as descriptions of mind-independent reality. The ontology is silent on the mathematics; the mathematics is silent on the ontology.

This is not a new observation. It is a consequence of well-established principles in philosophy of science:

- **Underdetermination** (Duhem-Quine): empirical evidence does not uniquely determine theoretical frameworks, let alone the ontological interpretations placed on them. Multiple ontologies are compatible with the same body of evidence because the evidence constrains theories, and theories are ontologically portable.
- **Paradigms and conceivable questions** (Kuhn): paradigms do not predict — they define what counts as a legitimate question, what counts as an anomaly, and what research directions are pursued. This is precisely the “space of conceivable theories” that this essay identifies as the proper domain of ontological evaluation.
- **Hard core vs. protective belt** (Lakatos): the “hard core” of a research program (which includes ontological commitments) does not generate predictions directly. Predictions come from the “protective belt” of auxiliary hypotheses — the specific theories that do the empirical work. The hard core determines which auxiliary hypotheses are conceivable.
- **Constructive empiricism** (van Fraassen): the empirical adequacy of a theory is independent of the ontological interpretation placed on it. A theory can be empirically adequate without its ontological commitments being true — because the predictions come from the mathematical structure, not from the ontology.
- **Structural realism** (Worrall, Ladyman): what science discovers is *structure* — mathematical relationships, patterns, regularities — not ontology. The mathematical structure persists across theory change while ontological interpretations shift. This directly supports the portability thesis: the predictive structure is what endures; the ontological framing is what changes.

These are not fringe positions. They are mainstream philosophy of science. What is novel is their concentrated application to the physicalism-idealism debate in consciousness studies — where the demand for “idealist predictions” persists as though these distinctions had never been drawn.

### **The Category Error Made Explicit**

The demand “Where are idealism’s predictions?” is structurally identical to asking “Where are idealism’s bridges?” or “Where are idealism’s pharmaceutical interventions?” Bridges and pharmaceuticals are products of engineering and medical science — disciplines that operate with ontologically portable methods. No bridge was ever built by deriving structural loads from the axiom that matter is fundamental. No drug was ever developed by deducing receptor binding from the claim that consciousness is epiphenomenal. The methods that produce these achievements are available under any ontology that accepts lawful regularity.

Similarly, no prediction was ever generated by an ontology. Predictions are generated by theories. Theories are ontologically portable. Demanding predictions from ontologies confuses the level at which each operates.

This is not a defensive maneuver — it is a logical clarification. The demand sounds reasonable because we are so accustomed to conflating ontology with methodology that the distinction has become invisible. Making it visible dissolves the demand, not by lowering standards, but by applying the right standard to the right target.

### **What the Right Standard Is**

If ontologies do not produce predictions, how should they be evaluated?

Ontologies operate at a different level. They determine the **space of conceivable scientific theories** — the range of research directions, questions, explanatory postures, and theoretical architectures that a framework permits or forecloses. An ontology that forecloses a productive research direction is costly. An ontology that opens a productive research direction that competitors foreclose is valuable. The evaluation is not “which ontology predicts more?” but “which ontology permits the investigation of more of what needs investigating?”

### **The Anti-Permissiveness Condition**

An immediate objection: “Isn’t a wider space automatically worse? Expansion without constraint is noise, not opportunity.”

This objection conflates permissiveness with expanded scope, but it identifies a real concern. An ontology that merely expands the conceivable space without providing discipline for working within it would indeed reward vagueness rather than rigor. The evaluation criterion is not “which ontology is most permissive” but “which ontology opens productive directions *while maintaining epistemic discipline*.”

This is where the project’s method — *Integration by Constraints* — becomes load-bearing. The expanded space is not unstructured. Every direction opened within it is subject to the same constraint-based evaluation: robustness across methods, recurrence across contexts, resistance to eliminative explanation, cost of exclusion. The expansion is valuable *because* it is paired with a discipline that prevents the wider space from degenerating into speculation. Without IBC, the expansion argument would be vulnerable to the permissiveness objection. With IBC, the expanded space is not “anything goes” — it is “more territory, same discipline.”

The anti-permissiveness condition also applies to the evaluation criteria in Section VIII: the expanded space must eventually produce theories that are themselves constrained, empirically engaged, and accountable to evidence. An ontology that opens space but whose space never yields disciplined theory is barren regardless of how wide it is. Expansion is a necessary condition for productive inquiry in foreclosed domains; it is not a sufficient condition.

Note that this standard — empirical accountability within epistemic discipline — applies symmetrically to both ontologies. Neither physicalism nor idealism is falsifiable at the ontological level; both are interpretive frameworks that accommodate the same neural correlations. The question is which framework makes better sense of the full range of phenomena. And here the evaluation becomes asymmetric — not in epistemic standards, but in explanatory scope.

## IV. Physicalism Contracts; Idealism Expands

### What Physicalism Forecloses

Many working scientists adopt physicalist priors pragmatically while remaining agnostic about fundamental ontology. The target here is not those scientists but the *ontological justification* invoked when consciousness-first interpretive postures are dismissed as unscientific. Physicalists study meditation, psychedelics, and near-death experiences — but typically with deflationary priors, interpreting them as neural artifacts or processing errors. The foreclosure is not on *investigation* but on *interpretive posture*: the framework rules out treating these phenomena as structural features of consciousness itself before the data can speak to that possibility. Physicalism systematically reframes certain research directions before investigation begins:

- **Consciousness as constraint rather than product.** If consciousness is assumed to be produced by neural computation, then the interpretive posture that treats the brain as a *constraint* on consciousness (rather than its generator) is ruled out before data is collected. Physicalists can and do study what happens when neural activity is suppressed — but the question “what happens to experience when constraints are loosened?” is not the question they are asking, because the framework does not recognize experience as something that exists independently of the mechanisms that supposedly produce it. The data is gathered; the interpretive posture that would make sense of a specific pattern in the data is foreclosed.
- **Contemplative phenomenology as evidence about consciousness.** Physicalists study meditation’s neural correlates extensively. What is foreclosed is treating contemplative reports as *evidence about the structure of consciousness itself* rather than as behavioral data to be explained by neurochemistry. The framework does not forbid the research; it predetermines which interpretive conclusions are legitimate before the research begins.
- **Non-ordinary experience as structural data.** Terminal lucidity, near-death experiences, and psychedelic phenomenology are actively studied under physicalism — but as anomalies requiring deflationary explanation, not as phenomena that might carry the explanatory weight a consciousness-first approach would assign them. The framework determines in advance what the phenomena *can* mean, not whether they can be investigated.
- **Biological competency as irreducible organization.** If all biological explanation is assumed to reduce to local microcausation, then investigating goal-states, error-signals, and corrective dynamics as *real features of biological organization* — rather than convenient shorthand — is systematically disincentivized. *Biological Competency* establishes that this disincentive prevents adequate explanation of development and regeneration.

The pattern is consistent: physicalism does not prohibit data collection but systematically constrains interpretation. Certain explanatory postures — treating consciousness as fundamental, treating phenomenological reports as evidence about consciousness rather than about neurons, treating non-ordinary experience as structurally informative — are ruled out by the ontological framework before the data can speak to them. This is what “contraction of the conceivable space” means in practice: not a ban on investigation, but a prior determination of which interpretive conclusions are admissible.

## What Idealism Permits

Idealism, by treating consciousness as fundamental and physical structure as its extrinsic appearance, expands the space of conceivable theories in a specific way: **it permits everything physicalism permits, plus directions physicalism forecloses.**

Every scientific theory that operates under physicalism — every equation, every model, every intervention protocol — transfers intact to an idealist framework, because the methodology is portable. The physicist, the biologist, the neuroscientist lose nothing. All of their theories, predictions, and interventions continue to work exactly as before, because those achievements belong to methodology, not to ontology.

What idealism adds is *conceptual permission* to investigate:

- The brain as constraint on consciousness (rather than only as producer)
- Contemplative phenomenology as a legitimate evidential modality
- Non-ordinary experience as potential structural data about consciousness
- Biological competency as irreducible organizational feature
- The relationship between meaning, intention, and physical process — not as epiphenomenal gloss on “real” (physical) causation, but as potentially causally operative features of a fundamentally mental reality

This is not speculation about what idealist science *will* discover. It is a structural observation about what idealist science is *permitted to investigate*. The expansion may prove fruitful or barren — that is an empirical question. But the question can only be asked if the ontological space permits it. Physicalism does not. Idealism does.

## The Asymmetry

The asymmetry is clean: idealism permits everything physicalism permits (because methodology is portable), plus directions physicalism forecloses (because idealism does not rule out consciousness-first explanatory postures a priori). Physicalism cannot make the reciprocal claim — it cannot permit everything idealism permits, because its defining commitment (consciousness is derivative) forecloses the directions listed above.

This asymmetry does not prove idealism correct. It establishes that idealism is *less restrictive* as an ontological framework — that it opens a larger space of conceivable scientific theories. Whether the newly opened space contains anything valuable is a separate question. But foreclosing the question before it can be asked is a cost that should be named.

## V. What the Constraint-Level Work Demonstrates

The constraint-level work in this project can now be positioned correctly — not as “early-stage science that hasn’t yet reached the mechanistic phase,” but as a demonstration of what becomes conceivable when the ontological space is expanded.

*Consciousness Across Cultures* is **phenomenological cataloging** that physicalism’s ontological framework excludes from the domain of legitimate evidence. Under physicalism, these are cultural artifacts to be explained by neurochemistry. Under an expanded ontology, they are potential structural data about consciousness itself — data whose scope, independence, and coherence constitute explanatory territory any adequate framework must address.

*Anomalous Phenomena and Consciousness* is **constraint identification** that applies a single posture — the brain constrains consciousness rather than producing it — across ten diverse phenomena. This posture is systematically foreclosed as an interpretive conclusion under physicalism. Under an expanded ontology, it reveals structural coherence across phenomena that physicalism must treat with separate, often ad hoc, explanatory mechanisms.

*Biological Competency* is **constraint identification** that shows control-level primitives (goal states, error signals, corrective dynamics) cannot be eliminated into purely local microcausation. This finding is ontologically neutral — emergentism accommodates it — but the investigation was guided by the question “what must any adequate explanation posit?”, a question more naturally formulated when the ontological space is not pre-committed to bottom-up sufficiency.

*Conscious Under Anesthesia* extends the constraint posture into clinical territory, showing that substantial neural suppression alters the *form* of awareness without eliminating it — a finding the constraint theory (brain as filter, not generator) predicts and the production theory must accommodate post hoc. Both are theory-level constructs; the ontological expansion is what makes the constraint theory conceivable.

These are not “early-stage results awaiting maturation.” They are demonstrations that an expanded ontological space opens research directions that a contracted space forecloses — and that those directions produce genuine explanatory traction.

Whether these unifications are substantive or merely verbal is a legitimate question — but it cannot be answered by pointing to the absence of micro-mechanisms. That demand confuses the level at which the work operates. Unification is evaluated by whether it reveals structure invisible under fragmented treatment. Mechanisms are evaluated by whether they specify causal pathways. These are different evaluative categories, and conflating them is part of the error this essay diagnoses.

## VI. The Real Gaps — and Where They Belong

Before examining the self-reinforcing cycle that maintains the category error, it is worth stating plainly what remains underdeveloped — and at which level each gap operates.

**The neural mapping problem.** If the brain constrains consciousness through dissociative processes, specific neural architectures should correspond to specific constraints. Clinical neuroscience has extensively mapped lesion-deficit correlations — and that mapping is ontologically neutral: both frameworks accept the same empirical data and reinterpret it within their own ontological frame. No one derives Broca’s area’s function from the axiom that matter is fundamental; the mapping is discovered empirically and then interpreted as production. The gap is in *scientific theory development* — developing a detailed constraint-based interpretive framework for the same data. This is a gap in *theory*, not in *ontology*. It exists because the ontological space that would have permitted this theoretical work was contracted for decades.

**The mid-level bridge.** Between “consciousness is fundamental” and “the brain constrains experience in specific ways” lies a theoretical space that requires filling. What determines the *specific form* of constraint? This is again a gap in *theory development* — the kind of gap that closes through sustained research within an expanded ontological space. It is not a gap in *idealism as an ontology*, any more than the pre-genetic gap in Darwinian biology was a gap in “the ontology of natural selection.” Darwin’s framework permitted the question; the answer came from decades of subsequent research. The framework’s job was to make the question

conceivable. It did.

**Predictive specificity.** Constraint-level predictions are structural: they specify directional asymmetries and forbidden configurations. They do not predict the specific content of any individual's experience under given conditions. But this is a property of the *theories currently developed*, not of the *ontological framework*. Nothing in idealism prevents the development of theories with greater predictive specificity. The demand for such specificity is legitimate — when directed at theories. Directing it at an ontology is the category error.

These gaps are real. They should not be minimized. But they should be correctly attributed: they are gaps in *scientific theory development within an expanded ontological space*, not gaps in *idealism as an ontology*. The distinction matters because attributing them to ontology makes idealism look foundationally deficient, while attributing them to theory development makes them look like exactly what one would expect in a research space that has been ontologically foreclosed for decades and is now being reopened.

## VII. The Self-Reinforcing Cycle

The category error compounds through institutional dynamics:

1. Generativity is defined by predictive track records — a property of theories, not ontologies.
2. Physicalism's ontological space has hosted theory development for centuries; idealism's has been foreclosed.
3. The resulting asymmetry in theoretical development is attributed to the ontologies themselves.
4. The ontology with fewer developed theories is rated as “unproductive.”
5. Unproductive ontologies receive less institutional investment (funding, graduate students, journal space).
6. Less investment produces fewer theories.
7. Fewer theories “confirm” the original assessment of unproductivity.

This is structurally identical to the self-reinforcing cycle *Asymmetric Methodological Restraint* identifies in how skepticism is applied: the initial asymmetry generates the evidence that appears to justify it. The question is whether the initial standard is appropriate — not whether ontologies that have been institutionally foreclosed have produced less institutional output.

The cycle is especially insidious because it operates through a *category error* rather than through explicit bias. No one needs to be intellectually dishonest for the cycle to persist. They need only fail to distinguish ontologies from theories — a distinction that physicalism's invisibility as a position (diagnosed in *Myth of Metaphysical Neutrality*) makes extremely easy to miss.

## VIII. What Would Change the Assessment

If the diagnosis in this essay is correct, then the appropriate evaluation criteria for ontologies are not predictive track records but *the quality of the conceivable space they open*. The test is ultimately empirical: an expanded space proves its worth when the phenomena it takes seriously survive rigorous investigation.

The consciousness-first expanded space opens research programs that physicalism's contracted space forecloses or dismisses. Concrete examples: the less-activity-more-experience pattern in

psychedelics, real-time neuroimaging of terminal lucidity in structurally damaged brains, veridical perception during cardiac arrest, verified past-life memories, mind-to-mind communication under controlled conditions. If a substantial subset of these phenomena withstand rigorous investigation, the expanded space is vindicated — it opened territory that turned out to be real. If they do not, the expansion opened territory that turned out to be empty, and the contracted space’s dismissals were correct.

This is where the evaluation becomes concrete rather than methodological. *Consciousness Across Cultures* maps the broader phenomenological landscape the contracted space excludes, while *Anomalous Phenomena and Consciousness* and *Conscious Under Anesthesia* argue that several of these phenomena already create identifiable pressure on production models. Whether that pressure intensifies or dissolves under further investigation is what decides the assessment.

## IX. What This Correction Does

This essay does not defend any specific claim made elsewhere in the project. It corrects the evaluative framework within which those claims are assessed. If *Myth of Metaphysical Neutrality* protects the project from false neutrality, and *Asymmetric Methodological Restraint* protects it from selective skepticism, then this essay protects it from being dismissed by a category error.

The correction shifts the burden of argument. Critics who accept the diagnosis can no longer dismiss consciousness-first work by pointing to the absence of predictive track records. They must either:

- Show that the research directions opened by the expanded space are not genuinely productive (an empirical challenge, not a definitional one)
- Show that the constraint-level work within that space is merely verbal rather than structurally revealing (an analytical challenge)
- Show that ontologies *do* produce predictions — that some scientific prediction depends on the truth of a specific ontological commitment rather than on the mathematical structure of a specific theory (a philosophical claim that, if defensible, would overturn a century of philosophy of science)

This does not protect the project from critique. It forces critiques to operate on the right terrain.

For working scientists, the practical implication is modest: this essay does not ask anyone to abandon mechanistic research or adopt a new ontology. It asks that the absence of predictive track records not be treated as evidence of ontological failure — because predictive track records are not a property of ontologies. And it asks that research directions opened by an expanded ontological space be evaluated on empirical merit rather than dismissed because they were conceptually unavailable under a more restrictive framework.

## Conclusion

The objection that consciousness-first frameworks “don’t build” is the most reasonable-sounding critique the project faces. It appeals to a standard — explanatory productivity — that everyone values. Its force comes from its apparent neutrality.

But the standard contains a category error. It credits an ontology with achievements that belong to a method. And it demands of ontologies a performance — predictive track records — that belongs to theories.

Ontologies do not predict. They determine what is conceivable. The correct question is not “which ontology has a better predictive track record?” — neither does, because ontologies don’t have predictive track records. The correct question is: “which ontology permits the investigation of more of what needs investigating?”

Physicalism contracts the space of conceivable theories by foreclosing consciousness-first research directions a priori. Idealism expands it by permitting everything physicalism permits plus directions physicalism forecloses. This expansion may prove fruitful or barren — that is an empirical question that can only be answered by working within the expanded space. But it cannot be answered by a standard that pre-disqualifies the space before the work begins.

The question is not whether consciousness-first frameworks have matched physicalism’s theoretical output. They have not — and the category error explains why the comparison is misconceived. The question is whether the ontological space they open generates productive research directions, genuine constraints, and progressive theoretical development. These are empirical questions. They deserve empirical answers — not a category error that forecloses them.

## References

- Chalmers, D. J. (1996). *The Conscious Mind: In Search of a Fundamental Theory*. Oxford University Press.
- Kastrup, B. (2019). *The Idea of the World: A Multi-Disciplinary Argument for the Mental Nature of Reality*. Iff Books.
- Kelly, E. F., Kelly, E. W., Crabtree, A., Gauld, A., Grosso, M., & Greyson, B. (2007). *Irreducible Mind: Toward a Psychology for the 21st Century*. Rowman & Littlefield.
- Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. University of Chicago Press.
- Lakatos, I. (1978). *The Methodology of Scientific Research Programmes*. Cambridge University Press.
- Laudan, L. (1977). *Progress and Its Problems: Toward a Theory of Scientific Growth*. University of California Press.
- Nagel, T. (2012). *Mind and Cosmos: Why the Materialist Neo-Darwinian Conception of Nature Is Almost Certainly False*. Oxford University Press.
- van Fraassen, B. C. (1980). *The Scientific Image*. Oxford University Press.
- Worrall, J. (1989). Structural realism: The best of both worlds? *Dialectica*, 43(1-2), 99-124.

## Related Essays in This Project

Available at: <https://returntoconsciousness.org/>

[Integration by Constraints \(ibc\)](#) — The method this essay presupposes

[Myth of Metaphysical Neutrality \(mmn\)](#) — The first dimension diagnosed here (methodology credited to ontology) extends mmm’s analysis

[Asymmetric Methodological Restraint \(amr\)](#) — The self-reinforcing cycle identified here parallels amr’s analysis of selective skepticism

[Where Explanation Stops \(wes\)](#) — Companion analysis of brute facts and stopping points

[Anomalous Phenomena and Consciousness \(apc\)](#) — Constraint-level work within the expanded space

[Biological Competency \(bio\)](#) — Constraint analysis within the expanded space

[Conscious Under Anesthesia \(cua\)](#) — Clinical constraint work within the expanded space

[Consciousness Across Cultures \(cac\)](#) — Phenomenological cataloging within the expanded space

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