Antonio Hidalgo

Transcendental Causality and the Intelligibility of the Real

The Second Way in the Light of Contemporary Science

EDITIONES · SCHOLASTICAE

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To Mercedes González

"To always have my head and heart in the present moment": thus you have embodied the true spirit of Poveda, attuning the lucidity of the mind to the tenderness of the heart, and knowing how to draw near with a goodness and closeness that turn each ordinary moment into a threshold where the presence of God may be found. Thank you, my friend.

"Destines them to eternity. He therefore, I believe, wants them to attend chiefly to two things, to eternity itself, and to that point of time, which they call the Present. For the Present is the point at which time touches eternity. Of the present moment, and of it only, humans have an experience analogous to the experience which [God] has of reality as a whole; in it alone freedom and actuality are offered them."

C. S. Lewis, *The Screwtape Letters*

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Introduction

The question of the meaning of human existence and of reality as a whole arises as an expression of the longings of the human spirit. For philosophical reflection, however, it carries within it another question, one that opens an encounter at the frontier between the most advanced physics and first philosophy: what sustains, here and now, the existence and the operation of all that is? It is, in another form, the classic Leibnizian question, why is there something rather than nothing?

The aim is not to inquire into the remote temporal origin of the universe, but to understand the very structure of the causality that makes it possible for something to be and to act at this precise instant. To ask when and how the universe began is one thing. To ask what makes the entities that compose it exercise their causal activity at this moment is something quite different. The first belongs to the physical and cosmological domain, the second to metaphysics. This essay is concerned with the latter.

If there obtains in the universe an order of causal interactions that operate synchronically as a multiplicity of essentially and operatively subordinated causes, then every multiplicity of that kind, whose causes cooperate at once and intrinsically in any effect, must be finite and must be founded on a necessary and unconditioned first cause. Such a multiplicity constitutes a hierarchical network of ontological dependencies which, in order to act here and now, requires a foundation that depends on nothing prior or concurrent. Without that foundation, neither the most complex synergy of forces, nor the most sophisticated quantum interaction, nor the slightest act of a living being could produce any effect in the present.

The position is not a return to medieval thought. It sets out from an analysis that takes seriously the complexity disclosed by contemporary science[1] and the logical demand of essential subordination. Where once we saw linear chains or possible infinite series, we now discover that the essential and operative causal multiplicity (that simultaneous and hierarchical cooperation of

[1] For example, the non-linearity of fundamental interactions, the emergence of systemic properties, the simultaneity of causes in ecological, neurological, or cosmological processes.

causes) reveals even more clearly the need for an uncaused foundation. For if each cause in the network receives its causal power from another which in turn receives it from another, and none possesses it of itself, then the entire network lacks causal efficacy in the present moment, unless it rests on something that does possess it originally.

On the theological scope of this book

The classical tradition, above all in its Thomistic formulation, distinguishes three modes of discourse about the first principle. Affirmative discourse, *per viam affirmationis*, attributes to the founding being the perfections discovered in the cosmos: being, unity, truth, goodness. Negative discourse, *per viam negationis*, denies of the founding being the imperfections that accompany those perfections in created beings: composition, mutability, dependence, limitation. Between the two, the discourse by eminence, *per viam eminentiae*, affirms that the perfections are in the founding principle in an eminent manner, without the limitations under which they appear in what is created.

The book uses the affirmative way only in its minimal core: the affirmation that a first cause exists and that its act is to be. The further characterization proceeds by the negative way. Each of the determinations that the book attributes to the first cause (unconditionedness, independence, uniqueness, transcendence of the physical order, pure actuality, the identity of essence and existence, intensive infinity) is obtained by the exclusion of limit. It does not depend on any external condition, it does not receive its power from another source, there cannot be two first causes, it does not belong to the physical order, it admits no potency, in it there is no real distinction between essence and existence, it is not possessed under any limited mode. The affirmative way in the strong sense, which would positively attribute perfections such as goodness, truth, intelligence, or will as recognized in what is created, lies outside the body of the book. So does the way of eminence, which would affirm them in a supereminent manner. The appendix (Part III) explores it with an exploratory status, under the declared supposition of a premise of additional content, without this altering the terminal character of the body of the demonstration.

To stop there respects the order of the demonstration. The affirmative way, exercised upon the being and the existence of the foundation, reaches a definite philosophical point of arrival. The negative way refines it by excluding what the first principle is not, and it is by this way that the book arrives at the *Ipsum Esse Subsistens*. The way of eminence calls for additional premises about the analogy of being, about the metaphysical transcendentals, about the personal character of actualized perfection. Those premises are legitimate, and the tradition has worked them out over centuries, but their unfolding demands an argumentative architecture of its own that the present book has not set out to develop.

Epistemic status and methodology

Before entering the argument proper, the epistemic status of what follows must be clarified. The thesis I defend is metaphysical, not physical or cosmological. What does this mean? I propose to understand it, along the lines formulated by Mariano Artigas, not as a mere isolated philosophical hypothesis withdrawn from all empirical control, but as a "necessary supposition" of science, one of the presuppositions of scientific research and of the intelligibility of its object, which the progress of scientific and technical knowledge does not refute but rather corroborates and enriches. In a stronger formulation (not the one Artigas chooses, though it is not avoided here), it is a universal and necessary condition of the possibility of scientific research and of the intelligibility of its object. It would be, then, a well-established metaphysical supposition, in the sense that, even though it cannot be refuted by any particular experiment (it is immune to falsification), it does receive support, corroboration, and enrichment through the success of science. Artigas himself puts the matter clearly:

"I would say," Artigas affirms, "that suppositions, insofar as they are preconditions or presuppositions, have a hypothetical character, but I would add that they cease to be hypothetical when they are corroborated by the success of scientific research. We might say that they possess a permanent core that is corroborated and also amplified by the new advances of science, so that they may also include some changing features that evolve over time. Thus the natural order is a general ontological supposition that is corroborated by the progress of science, but is also enriched thanks to new knowledge that provides new perspectives: such is the case, for example, of the theories that deal with the self-organization of nature" (*La mente del universo*, EUNSA, Pamplona, 2000, p. 83, translation mine).

Even so, although we affirm that the advances of contemporary physics come to support and enrich the vision set out in the book's thesis, I will often note that the findings of physics[1] which appear throughout the treatise are

[1]The Standard Model, general relativity, quantum mechanics, cosmological models with or without an initial singularity, the proposals of a multiverse or of eternal universes.

used with a strictly illustrative and phenomenological function, showing, in accessible and empirically articulated language, the structure of subordinated causal multiplicity that philosophical analysis identifies as universal. They do not function, by contrast, as probative evidence in the strict sense, but they do, I insist, as progressive feedback that enriches the metaphysical presupposition. The thesis does not follow from science. It becomes visible through it.

To make this epistemic status explicit matters for two closely connected reasons. In the first place, it preserves the autonomy of the demonstration in the face of scientific contingencies. Since the argument operates on the plane of ontological necessity and not on that of factual description, the core of the proof remains safe from any future theoretical reconfiguration of physics, whether the advent of a theory of everything or the quantum resolution of the initial singularity. These milestones, far from threatening the thesis, would be integrated into it as new phenomenological modalities that would enrich the metaphysical supposition without altering its logical validity.

In the second place, it forestalls a very common misunderstanding. What is being proposed is not a new version of the "God of the gaps" that fills with metaphysics what science does not yet explain. On the contrary, even a complete science, able to describe the last mechanism of the cosmos, would still leave unanswered the question of the ontological sufficiency of all that it describes. Metaphysics does not compete with science in its own domain. It operates at a distinct and irreducible level of questioning.

On the sense in which "demonstration" is spoken of here

One clarification remains, and to omit it would only breed avoidable misunderstandings. Throughout the pages that follow there will be talk of demonstrations, of deductive inferences, of the internal necessity of the argument. Let me make clear from the outset in what sense these terms are used, so that no more, and no less, is expected of the work than it can legitimately yield.

When we say that something "is demonstrated", we will not be claiming that the premises from which we set out are indisputable self-evident truths,

after the manner of the Cartesian clear and distinct ideas. By no means. A claim of that sort would befit an extreme rationalism, but it is undoubtedly excessive for this metaphysical argument. What is affirmed, instead, is something more modest yet no less serious: that the inferences are deductively valid, so that, the premises once granted, the conclusion follows with logical necessity, and that the premises, for their part, are philosophically defensible with articulated reasons, which will be offered in due course.

The difference matters, and a deductively valid demonstration does two things well at once: it carries the force of the premises over to the conclusion without loss, and it displays with clarity where the real point of philosophical dispute lies, which is rarely in the mechanics of the logical step but in the information on which it rests. Whoever accepts the premises must accept the conclusion. Those who nonetheless deny the conclusion will have to confront the premises critically, not with mere conjectures and still less with objections grounded in reasons of authority.

I share this because it seems to me the only honest way to present an argument of this kind. In the third chapter the reader will find that the three proofs set out there converge upon a single categorial premise, identified as (P3), according to which intrinsic ontological sufficiency, the sufficiency a being possesses of itself and does not receive from any other, cannot arise by the mere concatenation of derived sufficiencies, not even in an infinite series. Its status should be noted at once: (P3) makes analytically explicit the concept of essential subordination. It is not proved by data, but unfolds what that concept already entails. For this reason its content is articulated through what, in that chapter, I will call an "argumentative synergy", five considerations whose conjunction shows that to deny (P3) compels one to redefine the very notion of essential subordination. The probative weight of the argument therefore does not fall on (P3), but on the premise affirming that essentially and operatively subordinated causal structures really do obtain in the cosmos (P1). To that premise, and to its confrontation with the radical Humean objection, the first sections of that chapter are devoted. I have tried to offer that defense with the depth it deserves, sparing myself none of the steps that rigor seemed to demand. That, and no other, is the claim assumed here, and to that claim, I believe, the work can indeed respond.

On the use of science in the treatise

Let me return to the question of how the scientific examples that will populate the following pages are to be read, on which I shall expand in the second chapter.

I have already said that scientific advances do not weaken what we defend metaphysically. On the contrary, they offer a renewed conceptual framework that, in Artigas's terms, amplifies the structure of causal subordination defended here and gives it new dynamism. Yet we have also said that we will temper that emphasis, holding that the function of the physical examples throughout this study is descriptive and illustrative. I do not think this poses a problem, for it frees the discourse from a false epistemic dependence. It puts the relation between the scientific and the philosophical in its proper place: no future discovery of physics (neither a possible grand unified theory nor the quantum elimination of the classical singularity) could breach the core of the demonstration, which dwells on the ontological plane. Such advances act not as counterexamples but as vectors of progressive feedback that qualifies and enriches our understanding of the causal order.

This can also be seen from the standpoint of science itself, since the scientific community is quick to note that between scientific theories and the philosophical understanding of those theories there always intervenes an interpretive and analytic process. When one says, for example, that Einstein's field equation describes a dynamic covariation between the geometry of spacetime and the distribution of mass-energy, one is stating something that belongs to the scientific construct. When one says that in that relation a case of essential subordination is recognized, in the Thomistic sense of the term, one is doing something different: one is interpreting philosophically, from a declared realist metaphysics, what the formalism describes in its own language. One must not blur the two. The difference has to be drawn clearly and made explicit from the start.

Nor is the philosophical reading contrived or arbitrary. It is a philosophical reading in search of meaning, that is, of interconnection with wholes. At the same time it must be legitimate, not in the sense of operating free of all