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## E. J. LOWE ON THE RELATIONSHIP BETWEEN ONTOLOGY AND EMPIRICAL SCIENCE

In *The Four-Category Ontology*, E. J. Lowe defines the relationship between ontology and empirical sciences in this way. Each science aims at truth, seeking to describe accurately some part of reality. (According to Lowe, truth is single and indivisible, and reality is unitary and necessarily self-consistent<sup>1</sup>). The various descriptions of different parts of reality must, if they are all to be true, fit together to make a description which can be true of reality as a whole. The task of ontology is to render mutually consistent the partial descriptions of reality that emerge from the various sciences, in order to provide a unitary description of reality. However, we should not be misled by this talk of description of reality: the proper concern of ontology is not the descriptions we construct of it, but reality itself.

This task is achieved by dividing ontology in two parts. The *a priori part* is devoted to exploring the realm of metaphysical possibility, seeking to establish what kinds of things (or ontological categories) could exist and *co-exist* to make up a single possible world. (According to Lowe, this kind of possibility is not derivative from experience and needs to be explored and presupposed in construing what experience

reveals of reality.) The *empirical part* seeks to establish, on the basis of empirical evidence and informed by most successful scientific theories, what kinds of things do exist in the actual world. The two parts are strictly connected: in particular, the second part depends upon the first. Indeed, according to Lowe, we are in no position to be able to judge what kinds of things actually *do* exist, even in the light of the most scientifically well-informed experience, unless we can effectively determine what kinds of things *could* exist: empirical evidence can only be evidence for the existence of something whose existence is (antecedently) possible<sup>2</sup>. In this sense, once the realm of the metaphysical possibility has been defined, empirical evidence and scientific theories can tell us what there is, specifying, through the empirical ontology, what kinds of entities exist in the actual world and which entities we have to include in such categories.

These considerations highlight that the proper relationship between ontology and empirical sciences as being one of complementarity and cooperation<sup>3</sup>. Moreover, they allow to explain that the work of ontologists, in determining which kinds of things exist, is founded on scientific theories and results, and aimed at a synthesis between metaphysical principles (*a priori*) and scientific theoretical constructions (*a posteriori*). Obviously, this does not mean that ontology should impose

how to categorize the reality: ontology provides and studies the categories, but their application is the task of the scientists, who can only tell what they think there is in terms which presuppose some categorization of the entities in question. In this sense, the usefulness of ontology for (empirical) sciences is to chart the possibilities of existence, providing a (suitable) framework for categorizing the entities posited by scientific theories and for interpreting new (possible) empirical evidences<sup>4</sup>.

But, how can we have a unitary description of reality when the descriptions emerging from different disciplines or within the same discipline differ on some fundamental points? An example might be the debate between *String Theory* and *Loop Quantum Gravity* for the description of the quantum gravity. In such case, within the same discipline, we have different descriptions of reality that can hardly be unified by ontology, which does not have the conceptual tools for choosing between them. In this sense, a debate within a special science or between two or more different sciences might have an impact on the empirical ontology, creating some problems in establishing precisely what there is. And ontology, which is aimed at unifying the partial descriptions of reality that emerge from different sciences, cannot ignore this, especially if it can make difficult or undetermined the

categorization of the entities which exist in the actual world<sup>5</sup>.

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<sup>1</sup> E.J. Lowe, *A Survey of Metaphysics*, Oxford University Press, Oxford 2002, p. 3.

<sup>2</sup> E.J. Lowe, *The Four-Category Ontology*, Oxford University Press, Oxford 2006, pp. 4-5.

<sup>3</sup> E.J. Lowe, *More Kinds of Being*, Wiley-Blackwell, Malden-Oxford 2009, pp. 7

<sup>4</sup> E.J. Lowe, *The Possibility of Metaphysics*, Clarendon Press, Oxford 1998, p. 83.

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