

## **Review**

***Une Incertaine réalité. Le monde quantique, la connaissance et la durée.* by Bernard d’Espagnat**

François Laruelle (trans. pranav)

Bernard d'Espagnat, *Une Incertaine réalité. Le monde quantique, la connaissance et la durée.*<sup>1</sup> Paris, Gauthier-Villars, 1985. 15.5 x 24, X + 310 p., bibliogr., index.

The theses of B. Espagnat are now well known and have not fundamentally varied since *À la recherche du réel*. Before recalling them succinctly, one must mark that, far from all epistemological artefact, he poses to the totality of physics, but as a function of the quantum principle and the difficulties introduced by "Bell's inequalities", a specifically philosophical question: that of the *reality* to which science is supposed to access. This question is by definition "transcendental" in the large and authentic sense of this word and does not necessarily imply a response in terms of "transcendental realism" which the author precisely critiques here (p. 85 and later). The philosophers will recognize him for recalling them thus to a more important task (rethinking the real, cause and time) than epistemological descriptions and conceptualizations. His response is nuanced and perfect sometimes discharging further from a simple registration of contradictions between the macroscopic physics, relativistic and quantum, than from the promotion of a really new problematic. The stake is the realism of physics – the Author maintains it and we should credit him on this point for a "phenomenological" probity and a fidelity to the ultimate requisites of science. But classical and relativistic realism is attacked, by the experimental verification of Bell's inequalities, on its foundation itself which is the "locality" of phenomena and events in space-time. From there, before the impossibility despite everything of abandoning reality "in itself" and of veering to phenomenism, within a "non-local realism", between a reality independent of man and the reduction of this one to phenomena required by science and implicated in its techno-theoric operations. The Author makes the inventory of impossible attempts at the conciliation of unitary realism and the givens of microphysics. He notes some more recent developments (theories of irreversibility and complexity) which suggest the impossibility of escaping the order of phenomena.

Philosophers will appreciate the confidence that the Author makes in them very regularly, as well as their efforts for liberating the real or Being from operatory schemes of objects and from equations, and retrieving thus, in a quasi Kantian manner, a sense and lieu for liberty, causality, consciousness, art, etc. But they will ask how it is possible to sunder thus in two the real and to render it "uncertain"; of which difference or scission it is about here, and which operates it: science itself become transcendental subject? A subject sometimes physicist sometimes

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<sup>1</sup> [trans.]: *Reality and the Physicist: Knowledge, duration and the quantum world*, trans. J.C. Whitehouse & Bernard d'Espagnat, Cambridge University Press, 1989.

philosopher *ex machina*, etc.? It remains to disengage the “spontaneous philosophy” of the author.