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GERT H. MÜLLER

Laudatio

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Very honored Professor Goodman,

It is an event for me and a real joy to be present at the ceremony at which you receive the degree of doctor *honoris causa* from this university. Please accept my sincere congratulations.

In the speeches of the philosophers it was reported about the achievements of your life work; they did not spare time to enter into important and deep details of your thoughts and its further development. So allow me to contribute from my point of view as a mathematical logician in exhibiting your role for the questions of application of logical methods to philosophy.

Of course, here first your work is to be mentioned on the understanding of counterfactual conditionals, on dispositional predicates, but essentially on Hume's problem of induction or as you express it: projection. You do not isolate the said problems in an abstract logical area, cutted out of language just for the purpose, but you treat them, (observing the specifications imposed by the methods of modern logic) in the framework of epistemology; — as a contribution to the old problem how to come to valid forecasts.

Let me still mention another old dream of mankind, — to come to an overall understanding of world and man. Certainly the Indians intended to come to world views, but their systems became known to the West very late. The first giant in this endeavour of man was Aristotle. Western philosophy is standing on his shoulders at least till to the 17th century. Then (let me bypassing Leibnitz) the Kantian philosophy (of course basically influenced by Newton) still embraced the great questions of mankind in natural philosophy and in the humanities; but since then the factual separation between these areas took place; but more even natural philosophy was splitted in several branches. So there did not seem to be any hope to build again an (more or less) — all embracing system.

As Newton's great work paved the way to Kant's work so another great work, the Principa Mathematica by A.N. Whitehead and B. Russell paved the way to the philosophical enterprise of the Vienna school, (later called "positivisme"). Due to Whitehead and Russell, — and later to Zermelo, Tarski (for the truth-concept) and Bernays — we now can embed all of classical mathematics into the framework of type-theory (resp. set theory using first order logic only).

(Remark: The general embedding theorem-scheme says: all parts of classical mathematics can be treated (using the type-theoretic resp. set-theoretic language) by explicit definitions in such a way that the specific theorems of these parts become logical consequences of the said definitions together with the principles of type theory (resp. set theory) of course, including an axiom of infinity).

This is a great success! Question: should it not be possible to get using typetheory or first order logics, to set up an axiomsystem to built a general system at least for natural sciences (of course using mathematics)? Could this lead to an unified world view, strictly organized from a basis of assumptions expressible in a formalized language?

R. Carnap in his *Der logische Aufbau der Welt* and you, Prof. Goodman, in your *The Structure of Appearance* embarked into this ambitious and hard program. As different the approaches of Carnap and you are in detail, and how many of modifications in so many technical respects may be — or are — necessary, both have to be regarded on principle as great enterprises of man.

May I conclude with personal although rather unusual greetings from a man who died 20 years ago: Paul Bernays. Having been his assistant through many years at the Federal Institute of Technology, Zurich, I remember how often Bernays came back in reports and stories to his visit at your university and your home: he repeatedly stressed your personal kindness and hospitality and the broadness and high level of culture in discussions; needless to say that Bernays taught me a lot about your philosophical position and your work.

I am now deeply thankful that I can bring to you these greetings.