

Poincaré's conventionalism and its structural aspect.

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Poincaré always defends the same philosophy: it consists in a reconstruction program of the process of understanding scientific theories where the construction of scientific objects is simultaneously conceived with the construction of language, or more exactly, where the empirical basis is the occasion of the process of language learning.

The main thesis of this paper is that Poincaré's conventionalism must be ranked among these sources of structuralism that try to escape the difficulties of modern structuralism: if one adopts the *in re* version, the crucial feature is that the background ontology is not understood in structuralist terms; if one adopts the *ante rem* version, the crucial feature is that the talk about structures is exposed to a kind of third man objection.

Poincaré uses a psycho-physiological approach in order to justify his conventionalism in geometry, which is an improvement of an attenuated version of *ante rem* structuralism. My present concern is to incorporate Poincaré's inheritance in the actual discussion in philosophy of mathematics.