

Specker und Absolutheitsansprüche

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22/02/2020

Ernst Specker

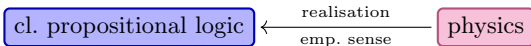
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“Logic is first of all a natural science.”

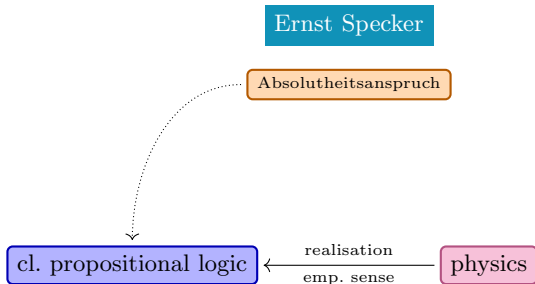
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cl. propositional logic

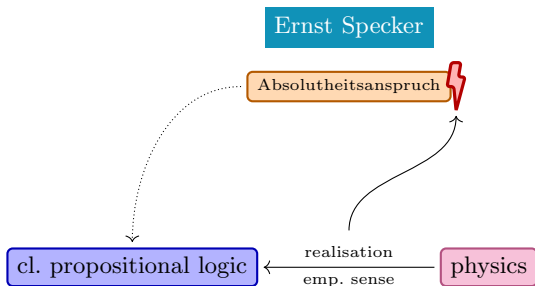
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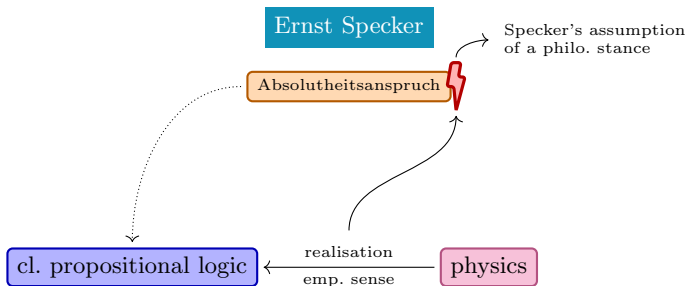
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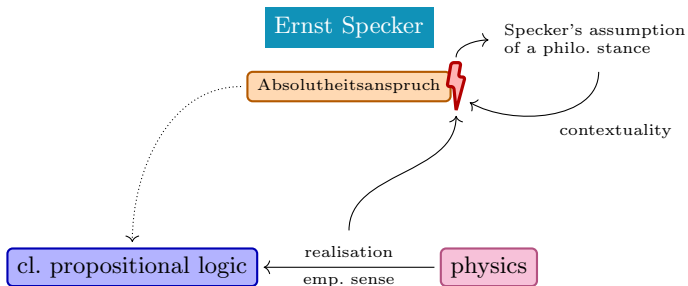
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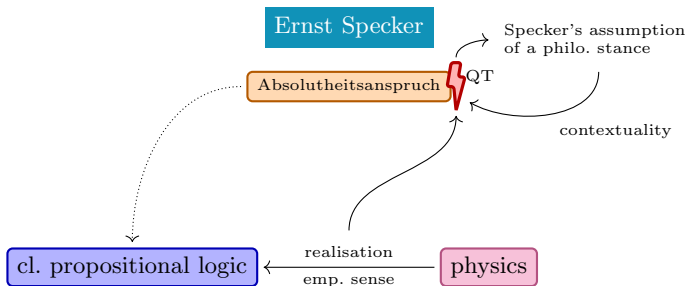
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Absolutheitsanspruch  QT

Dewey


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Absolutheitsanspruch



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Absolutheitsanspruch  QT

certain knowledge

practical activity

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certain knowledge

practical activity

“Greek thinkers saw clearly—and logically—that experience cannot furnish us, as respects cognition of existence, with anything more than contingent probability. Experience cannot deliver to us necessary truths; truths completely demonstrated by reason. Its conclusions are particular, not universal. Not being ‘exact’ they come short of ‘science’.” (Dewey, 1929, §2, p. 28)

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certain knowledge


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practical activity

“The work of Galileo was not a development, but a revolution. [...] But—and this ‘but’ is of fundamental importance—in spite of the revolution, the old conceptions of knowledge as related to an antecedent reality and of moral regulation as derived from properties of this reality, persisted.” (Dewey, 1929, §4, p. 92)

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spectator theory

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practical activity

“The element of indeterminateness is not connected with defect in the method of observation, but is intrinsic. The particle observed does not *have* fixed position or velocity, for it is changing all the time because of interaction: specifically, in this case, interaction with the act of observing, or more strictly, with the conditions under which an observation is possible; for it is not the ‘mental’ phase of observation which makes the difference.” (Dewey, 1929, §8, p. 194, emphasis in original)




“The discovery of the quantum of action shows us, in fact, not only the natural limitation of classical physics, but, by throwing a new light upon the old philosophical problem of the objective existence of phenomena independently of our observations, confronts us with a situation hitherto unknown in natural science. As we have seen, any observation necessitates an interference with the course of the phenomena, which is of such a nature that it deprives us of the foundation underlying the causal mode of description. The limit, which nature herself has thus imposed upon us, of the possibility of speaking about phenomena as existing objectively finds its expression, as far as we can judge, just in the formulation of quantum mechanics.” (Bohr, 1929, p. 115, as reprinted in (Bohr, 1985))

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“The principle of indeterminacy thus presents itself as the final step in the dislodgement of the old spectator theory of knowledge. It marks the acknowledgment, within scientific procedure itself, of the fact that knowing is one kind of interaction which goes on within the world.” (Dewey, 1929, §8, p. 196)

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Absolutheitsanspruch



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MP There are two incommensurable ideas of a measurement (uses of the term “measurement”): The idea that measurements reveal antecedent facts, and the idea that they constitute our (empirically warranted) contact with the world.

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Bohr

Dewey

Sellars

Ernst Specker

Jauch/Piron

Wigner

Absolutheitsanspruch



QT

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Absolutheitsanspruch  QT

Observation Givenness in the “interpretations” of quantum mechanics.
Is the MP symptomatic of a prevalent Absolutheitsanspruch?

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Absolutheitsanspruch



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stability

readiness to submit to capt. pict.

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Absolutheitsanspruch



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“A *picture* held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably.” (Wittgenstein, 1953, §115)



Thank you for your attention!

“[D]iese Physik erweist sich im wesentlichen als eine Form der klassischen Aussagenlogik, welche so einerseits eine typische Realisation erhält und sich andererseits auf fast selbstverständliche Art des Absolutheitsanspruches entkleidet findet, mit dem sie zeitweise behängt wurde. Die folgenden Ausführungen schliessen sich an diese Betrachtungsweise an und möchten in demselben empirischen Sinn verstanden sein.” (Specker, 1960, p. 1)

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