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ERRATUM

Erratum to: Between proof and truth

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Appendix

In this Appendix, we would like to add some specifications about our paper and our bibliographical references.

The use of games in logic is manifold. In proof theory, the idea of employing winning strategies for games associated with sentences in order to interpret the content of proofs goes back at least to Lorenzen (1959). From a more semantical point of view, Hintikka developed at about the same time game theoretical semantics (GTS) for logic.

In recent years, Coquand and Krivine have done some very insightful work on the computational content of classical proofs. In Coquand (1995), Coquand introduced games with backward moves and reformulated Gentzen's and Novikoff's "finitist sense" of an arithmetic proposition as a winning strategy for the game associated with it. Moreover, he proved that classical means of proof were constructively admissible in the sense that, starting from winning strategies for premisses, a proof would effectively yield a winning strategy for the conclusion. A similar link between classical proofs and

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winning strategies for games with backward moves also appeared in Hayashi (2007) as well as in Tait (2005, p. 236). Denis Bonnay (2004) adapted Coquand's results to the context of GTS and offered a philosophical interpretation showing that this technical work could be used to make sense of Hintikka's suggestion of a constructively acceptable definition of GTS truth. Our exposition of this material closely followed Bonnay (2004). We do not claim any novelty here.

Rather, the aim of the paper was to draw on those results to discuss the truth of Gödelian sentences. In this respect, another important result was proved by Krivine (2003, pp. 272, 274) [also mentioned in Bonnay (2004) and hinted at in Tait (2005)]: in the setting of games with backward moves, Verifier has a winning strategy if and only if she has a computable winning strategy. So, in moving from standard semantical games to games with backward moves, we get effective playability as a bonus. Truth is now defined as the existence of a computable winning strategy for Verifier in the modified game. In other words, it hinges on effective notions only. This is in line with the requirement of playability of language games which is characteristic of constructively minded philosophers like Dummett and permits to establish the truth of G in as "unproblematic" a way as Dummett wanted.

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