An Epistemological Difference Between G1 and G2

Bernd Buldt

The first and the second Gödel incompleteness theorem ("G1" and "G2" for short), though they are intimately connected, differ considerably. While G1 remains stable under substitution of provability predicates, G2 shows a certain sensibility for the provability predicate employed. Using suitable provability predicates is it easy to formally prove consistency within the system itself. This fact, the intensionality of G2, is still yet not widely acknowledged nor adequately understood.

Continuing earlier work on this problem, *see* [1] and [2], I will argue for the thesis, that the G1/G2–difference, i.e., the extensional/intensional–difference, goes hand in hand with an epistemological difference. The argument rests on an anlysis of the conditions each G2–proof has to satisfy.

Literature

[1] Re–extensionalizing Gödel's second theorem, in: *Philosophy of Mathematics. ...*, ed. by J. Czermak, Vienna 1993, pp. 221–230.

[2] Anmerkungen zum Beweis des Zweiten Gödelschen Satzes, in: *Analyomen 2. ...*, ed. by G. Meggle, Berlin 1997, pp. 31–42.

Address: Department of Philosophy, University of Konstanz, D – 78457 Konstanz, Germany
E-mail: `bernd.buldt@uni-konstanz.de`