

Re: Python from Wise Guy's Viewpoint

Source: <http://coding.derkeiler.com/Archive/Lisp/comp.lang.lisp/2003-10/4220.html>

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Ray Blaak wrote:

> Aatu Koskensilta <aatu.koskensilta@xortec.fi> writes:

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>>Ray Blaak wrote:

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>>>The clearest, simplest, most elegant presentation of Goedel's result

>>>I have seen is called "Beautifying Gödel", by Eric C.R. Hehner

>>>(my old supervisor in fact) at <http://www.cs.toronto.edu/~hehner/God.pdf>

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>>There is at least one error in this presentation. Gödel's second

>>incompleteness theorem does not say that [you can't fix things by adding

>>axioms] but that [a theory cannot prove its own consistency]

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> Hmm. Upon digging a bit I am running into discussions of Löb's theorem and

> Kreisel's proof of *that* by showing adding axioms still give trouble.

There's no need to consider Löb's theorem or invoke Kreisel here. It's well known that PA (and very weak subtheories thereof) is essentially incomplete, i.e. any consistent axiomatisable extension is incomplete.

Also, in the article Hehner is, perhaps unknowingly, flirting with truth predicates – which might explain some of the misconceptions – with his "interpreting" function I, which is essentially a minimal partial truth predicate. If one wants to go in this direction, it would be much better not to confuse people with eccentric expositions and instead provide references to the literature on partial truth predicates.

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"Wovon man nicht sprechen kann, darüber muss man schweigen"

- Ludwig Wittgenstein, Tractatus Logico-Philosophicus