

Re: True Gems of Scientific Epistemology

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Herman Jurjus <h.jurjus@hetnet.nl> wrote in message news:<2mmr09FoqaetU1@uni-berlin.de>...

> *Well, i'll probably give only a caricature, but i'll have a go.*

>

> *The intuitionists always claim that they want to restrict to
> constructions that can be 'really carried out' (in the mind). But if you
> look at the resulting mathematics, intuitionists sometimes also accept
> constructions that can only be carried out 'in principle'.*

Okay, but they do not restrict the constructions to effective procedures?

> *Essenin-Volpin chooses a more radical path. One in which the intuition
> '1,2,3,...' does not lead to a unique sequence, because astronomically
> large numbers do not exist; but how far you can count is undeterminable
> (hence the non-uniqueness).*

Okay. Undeterminable in which sense? Like undecidable?

> *The result is (a start of) an alternative sort of mathematics in which
> complete induction does not hold (0 is feasible, if n is feasible then
> so is n+1, but not every natural number is feasible.)*

Ok.

> *It is quite difficult to turn that into a formal system, since, it has
> rather farreaching consequences: after all, a formal language is nothing
> but some infinite set, a mathematical thing of some kind. And if you
> change how you reason about infinite sets, you must also change the way
> you reason about languages, of course.
> (Do unfeasibly long sentences count as sensible sentences, for example?
> Do unfeasibly long proofs of inconsistency count as inconsistency proofs?)*

I see. Thanks for the information.

Regards,

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Eray Ozkural