

Re: Goedel – interesting problem?

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"|–|erc" <gotcha@beauty.com> wrote in message
news:<5Kaxc.17964\$rz4.10711@news-server.bigpond.net.au>...
> "Daryl McCullough" <daryl@atc-nycorp.com> wrote in
> > |–|erc says...
>
> > > I've nearly worked out the mechanics of the godel statement being proven
> > > in another system.
> > >
> > > TRUTH MAINTENANCE
> > >
> > > G = "this statement G has no proof that it is true"
> >
> > First of all, you have to say what *language* you are
> > using, and what axioms you are allowing for your proofs
> > before this makes any sense.
>
> These sentences are trivial to represent, predicate calculus to form the
> semantic assertion, peano arithmetic to quantify the self reference.
>
> Then in English as equivalent statements. Provable lies are false.
>
>
> >
> > > Does G have a proof?
> > > No, if it had a proof G would be false.
> > >
> > > Is G true?
> > > No, it has no proof therefore it can't be declared true.
> >
> > Once again, whether something is provable or not depends
> > on what axioms you are allowed to use. On the other hand,
> > whether something is true or not depends, not on the axioms,
> > but the *interpretation* of the formulas.
> >
> > Proof has to do with axioms and rules of inference.
> > Truth has to do with interpretations of sentences.
> >

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- > > *In this case, if it really is true that G has no proof, then*
- > > *"G has no proof" is true, whether or not it is provable.*
- >
- > *no, that's the catch 22 nonsense Godel will have you believe.*
- > *Truth is what's proven. An interpreter is a proof checker.*
- >

Interestingly, Godel would have agreed with you before he came up with his result. He was completely adverse to using model–theoretic methods in logic because of the circularity involved in using naive set theory to formulate it. If you look at Godel's own proof, it is done completely proof theoretically—there is no talk of models or interpretations. He began his program to *prove* that everything which is true is provable, but failed spectacularly—cementing his importance in the subject forever. Your ignorance has been betrayed yet again.

- > *We assume Proof(x) is a standard formula. Godel *then* derived it*
- > *is impossible. If you are examining the proof again you can't assume*
- > *Proof(x) is impossible.*
- >
- > *anything that is proven is then TRUE, that's why we prove things, how*
- > *can proof and truth have different argument types.*
- >
- > *"If G has no proof then it is true" << this is a proof, a self defeating proof.*
- >
- > *Required to prove G.*
- > *CASE 1*
- > *G has no proof*
- > *if G has no proof then it is true*
- > *G has no proof \rightarrow G*
- > *Modus Ponens*
- > *G*
- >
- > *CASE 2*
- > *G has a proof*
- > *AX, X has a proof \rightarrow X*
- > *Intantiate results of proof*
- > *G*
- >
- > *Why are *you* allowed to *interpret* sentences and computers can't?*
- >

Do you even know what an interpretation is? An interpretation is a function which maps objects and predicates (hence sentences) to truth values. There is no infinitive verb "to interpret" in this context. Computers don't interpret, in this sense, and neither do people. Both a person and a computer can evaluate the function to get a truth value, and they'll get the same result. I would explain the gritty details, but you would just ignore them anyways. In any event, your ignorance has been betrayed again.

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