

## Re: Exception to the rule? (Tarski's T-scheme)

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> "Jeffrey Ketland" <ketland@ketland.fsnet.co.uk> wrote in message news:<  
> cbc3g\$pf\$1@news5.svr.pol.co.uk>...  
>> Paul Holbach (paulholbachSPAMBAN@freenet.de) wrote in message  
>> <881c8779.0406230653.15b5483f@posting.google.com>...

>> So "phi" cannot be eg "This sentence is not true".

> Right. That's the simplest restriction which yields a consistent theory of  
> truth. It is in effect what Tarski proposed in 1933. Notice that the  
> sentence "This sentence is not true (in the object language)" can be  
> constructed, but it is a sentence of the meta-language, and so the T-scheme  
> does not apply to it. Actually, this sentence is then a truth of the  
> meta-language (actually, it is provable in the formalized truth theory).  
> Tarski's solution to the Liar paradox is thus a hierarchy solution, where  
> each language in the hierarchy is properly stronger than any earlier one (in  
> particular, the truth predicate for language  $L_n$  only exists in language  
>  $L_{n+1}$  and is undefinable in  $L_n$ ).

I see.

> Many recent authors have argued against Tarski's hierarchy solution and have  
> presented three main objections  
>  
> (i) Kripke's: we might have intertwining truth claims (his example  
> involves  
> Nixon and Dean), which cannot be located in the hierarchy.  
> (ii) Putnam's: on the Tarskian approach, we cannot talk coherently of  
> the  
> whole hierarchy, but it seems that in English we can.  
> (iii) On Tarski's approach, there is no single univocal notion of truth  
> (or  
> truth predicate): there is only "truth in  $L$ ", where  $L$  is some particular  
> interpreted language.

Although I'm not familiar with the details of Putnam's criticism of Tarski's theory, I think he may have a point here, for in natural languages the truth predicate really \*seems\* to be "all-encompassing".

By the way, Priest endorses sheer contradiction:

"'True-in-English' is not expressible in English (Transcendence). But, of course, it is expressed in English by 'true-in-English' (Closure). To say what cannot be expressed, one has to express the very thing."

[Priest, Graham (2002). /Beyond the limits of thought/ (2nd ed.). Oxford: Oxford University Press. (p. 207)]

> > *Paraconsistentists such as Graham Priest willingly bite the bullet, > > accepting both the unrestricted T-scheme and inconsistency. For him "L > >  $\leftrightarrow \sim L$ ", i.e. "L &  $\sim L$ " is true.*

> *Right. But they have to modify both logic and the theory of truth is a > really peculiar way, by moving to a 3-valued logic, with truth values T > ("only true"), F ("only false") and B ("both-true-and-false"). > I don't accept the dialetheist approach at all.*

Priest is an inspiring logician and I think he deserves to be taken very seriously, but there are some fairly unpalatable consequences of dialetheism. For example, in Priest's logic of paradox (LP) the following is valid:

$$(A \ \& \ \sim A) \models (A \ \& \ \sim A) \ \& \ \sim(A \ \& \ \sim A)$$

So whoever affirms a contradiction must affirm both it and its negation!

That is to say, if the dialetheist is right, the non-dialetheist is always right too.

What is more, Priest accepts

$$T(\sim A) \leftrightarrow F(A)$$

and

$$F(\sim A) \leftrightarrow T(A)$$

but he rejects

$$T(\sim A) \leftrightarrow \sim T(A)$$

and, correspondingly,

$$\sim T(A) \leftrightarrow F(A),$$

thereby separating untruth from falsity, which stipulation is very counter-intuitive in my view.

Be it as it may; it still is an open question whether we're actually able to make real sense of "logical superpositions":

$1 \vDash v("A") \ \& \ 1 \vDash v("\sim A")$

- > *They claim to have a theory*
- > *of truth which is semantically closed: in which the many-valued object*
- > *language contains its own semantics. I dispute this, and I have recently*
- > *published a short paper (in Analysis, "Can a Many-Valued Language*
- > *Functionally Represent its own Semantics?", October 2003) pointing out that*
- > *such a many-valued language L cannot contain its meta-language, since the*
- > *semantic valuation mapping  $\|.\| : \text{Sent}(L) \rightarrow \{T, F, B\}$  is not definable in*
- > *the language L, at least not if the language contains constants "T", "F" and*
- > *"B" and proves them distinct.*

As you know, Priest has a very high logical pain threshold:

"This is one of the distinctives of the position of dialethic paraconsistency, especially as practiced by Priest. The metalanguage of theorising is itself inconsistent, for Priest rejects any radical break between the metalanguage and the object language. The latter is inconsistent, and so is the former."

[Restall, Greg (1995). /Paraconsistent Logics!/. Retrieved from <http://consequently.org/papers/plog.pdf>]

- > *There are other formalized theories of truth around. If you can read German,*
- > *the best summary is a book by Volker Halbach 1996, Axiomatische*
- > *Wahrheitstheorien\_ (Berlin).*

With German being my mother tongue, I should be able to read it.

- >> *My initial point was that if it were the case that nothing exists,*
- >> *then there would be neither truths nor falsities, that is, neither*
- >> *true sentences nor false sentences.*
- >> *In other words, if nothing existed, something would be the case but*
- >> *nothing would be true!*

- > *Sort of. When we refer to "something being the case", we seem to be*
- > *referring to a \*proposition\* (or \*state of affairs\*), not a sentence. What*
- > *would be the case if there were nothing? The proposition that there is*
- > *nothing would be the case. But would this proposition be \*in\* the world*
- > *under consideration? Presumably not, since there is nothing there. This*
- > *raises sticky questions about free logic, empty models, the nature of*
- > *propositions/states of affairs, and so on.*

You're right, our discussion would begin to turn metaphysical if we went into that.

If by "something being the case" we refer to a fact, and if we regard facts as entities, then it is impossible for there to be absolutely nothing, because if nothing existed, the fact that nothing exists would exist at least.

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"Note too that the question of the existence of facts is a horse of a very different color from that of the existence of things. There being no \*things\* is undoubtedly a possible situation, there being no \*facts\* is not (since if the situation were realized, this would itself constitute a fact)."

[Rescher, Nicholas (1984). /The riddle of existence: An essay in idealistic metaphysics/. Lanham, MD: University Press of America. (p. 16)]

"To be sure, it could be maintained that there is a difference between an 'empty world' and 'no world at all', in that even an empty world can have a \*nature\* of sorts \*qua\* world—by way of characterizing hypotheticals like 'If there were things here, they would have to have such—and—such a nature'."

[Rescher, Nicholas (1984). /The riddle of existence: An essay in idealistic metaphysics/. Lanham, MD: University Press of America. (p. 2)]

So if you deem the existence of absolutely nothing possible, you'd better not regard facts as entities!

I do consider the existence of nothing possible, and so I cannot help but regard the talk about facts as ontologically noncommittal.

If nothing existed, then it would be so, with "being so" not having any existential import.

> *But certainly you can't have the T-scheme, since it requires that at least*  
> *two things exist.*

Right. – Thanks to you, I'm now well aware of this fact. :-)

Regards  
PH