Re: Why are rules of inference not laws of sentential calculus?

Source: http://sci.tech−archive.net/Archive/sci.logic/2005−10/msg00294.html

- *From*: "George Dance" <georgedance04@xxxxxxxx>
- *Date*: 12 Oct 2005 03:40:22 −0700

andrewspencers@xxxxxxxxx wrote:
> George Dance wrote:
> > > "[(p−>q),p] / q" written in the metalanguage seems to mean exactly the
> > > same thing as "[(p−>q) ^ p] −> q" written in sentential calculus,
> > > especially considering that in both cases the variables p and q range
> > > over the same things: sentences of the sentential calculus.
> >
> > They correspond − for instance, they're logically equivalent (it has to
> > be that one's true iff the other is true) − but they don't say the same
> > thing.

> BTW you didn't dispute my claim that in both cases "p" and "q" range
> over the sentences of the sentential calculus. Is my claim really
> correct? I thought that any variable "x" which ranged over the
> sentences of some language L could not exist in L, but must exist in
> some language M which is a metalanguage of L.

You may be confusing me with another 'george' − one who tends to shout
a lot for emphasis. I've said nothing about 'metalanguages.'
What I mentioned were two different 'levels of description'.

'Metalanguage' was a Tarski invention for one such case of different
levels, which does not require them even being two different languages
− if the two of us were talking about cars or women, for instance, and
then began talking about what a statement one of us had said earlier
(whether it was really true or false), we'd have shifted
from using English as an object language to using it as a metalanguage
without even making a distinction. Metalanguages exist only
relatively; the same language can be an OL or a ML in two different
contexts, or even in two different applications of the same context.

To make all that relevant to your 'claim', I'd say that I agree with
it; it looks quite clear that, in PC, formulas involving propositional
variables like p and q (plus the operators) are 'metalanguage'
statements relative to formulas involving constants like P and Q (plus
the same variables). Which may contradict what 'george' et al have
been telling you (I haven't paid that much attention to their posts

here), but that's not a problem; he and I are not singing using the
same hymn book anyway.

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- ***References***:
  - ♦ ***Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* andrewspencers
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* timvaz_059
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* andrewspencers
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* Torkel Franzen
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* george
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* andrewspencers
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* George Dance
  - ♦ ***Re: Why are rules of inference not laws of sentential calculus?***
    - ◊ *From:* andrewspencers

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