

# Re: In need of the all-out revision of symbolic logic

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On Apr 29, 4:59 am, Eukie\_M\_SHIRAISHI <ms.eu...@xxxxxxxxxx> wrote:

In the Fregean Theory of Logic (the standard theory of logic in the 20th century),  
 $p$  implies  $q$  has had been defined to mean  $\text{not-}p$  or  $q$ .

Here let  $P$  be "A lion is a mammal" and  $Q$  be "A lion and a whale are both mammals"

It is clear that  $Q$  implies  $P$  but  $P$  does not imply  $Q$ .

Hence  $P$  implies  $Q$  is a falsity.

On the other hand,  $\text{not-}P$  or  $Q$  is a truth.

Therefore, it is a mistake to define  $p$  implies  $q$  to mean  $\text{not-}p$  or  $q$ .

Sorry, but I don't see why is  $\text{not-}P$  or  $Q$  true. I mean, what if a lion and a whale are both not mammals?

It is not the situation in real world, but when you compare logic statements, only the possible truth values of  $p$  and  $q$  matter. In our case, they both are true, so the truth values of both  $p$  implies  $q$  and  $\text{not-}p$  or  $q$  are T.

I'm not a logician, so I'd be delighted to see an explanation on the subject...

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