

Re: Restrictable Primitives?

Source: <http://sci.tech-archive.net/Archive/sci.logic/2008-03/msg00663.html>

- *From:* G. Frege <nomail@invalid>
 - *Date:* Wed, 12 Mar 2008 01:41:34 +0100
-

On Tue, 11 Mar 2008 11:50:45 -0700 (PDT), MoeBlee <jazzmobe@xxxxxxxxxxxxx> wrote:

Just changed your notation and formatting slightly (I hope you don't mind):

For our first order languages, the definition of /term/ is recursive. For a language with [...] first order function symbol[s] 'f' ['g', 'h', ...], one of the clauses in the definition of /term/ would be:

If t is a term [and f is a function symbol], then f(t) is a term.

Now that is part of a RECURSIVE definition, so everything going ON UPWARDS to build more and more terms depends on that clause.

Then for our first order languages, the definition of /satisfies/ is recursive.

First, though is the recursive definition of what a term denotes:

One of the clauses would be:

If t is a term [and f is a function symbol], the f(t) denotes the result of the function denoted by f applied to the object denoted by t. So the function symbol f must map to a function that is total on the universe of the model, so that we won't be "jammed" when [we] seek the denotation of f(t) for any term t.

And that is part of a recursive definition, so everything going ON UPWARDS to determine the denotation of more and more terms depends on that clause, and then the recursive definition of /satisfies/ depends on the whole recursive definition of the denotation of a term.

For any fuller explanation than this, since I don't have time to just pour out an entire chapter of a book in a few posts, you really need to read a good book on mathematical logic, where all of this is carried out both formally and with an author's explanation.

Re: Restrictable Primitives?

Well done.

F.

--

E-mail: info<at>simple-line<dot>de

.