

24.400
Proseminar in philosophy I

Fall 2003

Formal properties and formal concepts

From 4.122 it appears to follow that ‘formal’, ‘structural’, and ‘internal’ are interchangeable.

4.123 says that formal properties/relations are those properties and relations that are non-contingently instantiated. In other words, the claim that an object has such-and-such formal property is either necessarily true or necessarily false, and hence on Tractarian doctrines fails to say anything (4.124).

“Proper” properties and relations (4.122) are just those that aren’t formal, and which can be meaningfully ascribed to objects.

The first sentence of 4.126 suggests that there is a distinction between formal concepts and formal properties. And later on we are told that formal properties are the “characteristics” of formal concepts. Further, the examples of formal concepts in 4.1272 also appear to be examples of formal properties (NB: ‘concept’ is surely intended to be read along Fregean lines, i.e. as (more-or-less) ‘property’.)

Given that formal concepts are “signified” by variables (4.1271/2), not by predicates, one appealing suggestion is that the difference is simply one of generality of application: two formal properties are *being an object* and *being identical to a*, but only the former property is signified by a variable (any objectual variable, e.g. ‘*x*’), and is thus also a formal concept. *Being identical to a* may be said to be a “characteristic” of the formal concept *object* because anything that is identical to *a* falls under the formal concept *object*.

N again

5.501 seems to suggest (at any rate if we ignore the rather obscure (3)) that the way of constructing Tractarian propositions using the N-operator either employs “direct enumeration”:

$$N(P, Q, R)$$

(i.e. $\sim P \ \& \ \sim Q \ \& \ \sim R$)

or else uses a function, a.k.a. an open sentence (e.g. ‘ fx ’, or ‘ gxy ’):

$$N(fx)$$

(i.e. $\sim fa \ \& \ \sim fb \ \& \ \sim fc \ \& \ \dots$, using up every Tractarian name)

And if so, then plainly the proposition that $(\forall x)fx$ cannot be expressed. We have to start with ‘ $N(fx)$ ’, and now we are stuck, because this in effect binds the variable ‘ x ’. And, under the Tractarian assumptions that (a) the same objects exist in every possible world; (b) every object has a name; and (c) the possible-worlds conception of a proposition is correct, ‘ $N(fx)$ ’ expresses the proposition that $(\forall x)\sim fx$. And applying ‘N’ again just gives us the equivalent of ‘ $\sim(\forall x)\sim fx$ ’, i.e. ‘ $(\exists x)fx$ ’. (NB: in this paragraph and the next ‘proposition’ is used in the modern sense, not as in the *Tractatus*.)

One suggestion, due to Geach (see also Soames) is to get the effect of negating ‘ fx ’ by writing ‘ $x:N(fx)$ ’, interpreted as specifying the following collection of sentences: $\sim fa, \sim fb, \sim fc, \dots$, using up every Tractarian name. Then the proposition that $(\forall x)fx$ may be expressed thus: $N(x:N(fx))$ (i.e. $N(\sim fa, \sim fb, \sim fc, \dots)$); and the proposition that $(\exists x)fx$ may be expressed thus: $N(N(x:fx))$ (i.e. $N(\sim fa \ \& \ \sim fb \ \& \ \sim fc \ \& \ \dots)$). Fogelin (ch. 6) disputes that this is a Tractarian-acceptable repair.