Handout 10
Modality: Stalnaker

BENACERRAF'S PROBLEM RESTATED. In order to be able to assign reference to individual constants there must be a causal connection between acts of reference and objects of reference. No such relation available when objects of reference are mathematical entities.

This claim can be applied to the metaphysics of possible worlds. We cannot gain knowledge of isolated universes by the very fact of their causal (and spatiotemporal) isolation. Lewis responds that we have more warrant for mathematical truths than for any claims of the epistemology of mathematics.

One might accept this defence, yet still retain another insight of Benacerraf's argument. The insight is the challenge to explain the lack of analogy between knowledge of actual material objects and knowledge of possible material objects, including some (though necessarily not all!) possible worlds. We know properties of actual material objects through a causal contact. But this is not the case with possible material objects. Very well; but can't we at least state, as a principle, that:

> Knowing actual objects differs from knowing merely possible objects: different modal categories require different epistemology? (10-1)

It is like saying that epistemology of mathematics need not be same as epistemology of the physical world. Different areas of enquiry demand different epistemological methods. The problem is that, according to modal realism, *all* that there is to the difference between actualia and possibilia is their location. This difference in location is not modal: it is physical (at least for some possibilia). And we do not suppose that a difference in location should warrant a difference in epistemological methods.

Question 1. Explain the above remark 'necessarily not all'.

LIBERAL PLATONISM. One formulation of liberal platonism, designed to deal with the epistemological challenge just described, is in saying that mathematical objects themselves are constituted by the practice where claims about them are made. This leads to a consequence that mathematical objects are contingent, so far as the mathematical practices are contingent as well. Stalnaker repudiates this version of liberal platonism.

A different version of the view is that the *commitment* to the existence of mathematical objects is constituted by the endorsement of the practice where claims about them are made. This is spelled out further by saying that there is no demand for an epistemic account to be supplemented in order to justify the practice. The practice justified itself internally. This is a standard Carnapian theme we saw before.

Now there are a number of questions to answer at this point. Is liberal platonism a version of fictionalism? No, because it does not need to help itself with a realist story that is literally true—such as Rosen's encyclopedia of modal realism.

Is liberal platonism a version of instrumentalism? That would mean that liberal platonism does not take seriously the truth value of quantification over mathematical objects. The answer is, as I understand it, that the practice of mathematics contains *assertions*, that is, contains statements that, within that practice, are taken to be truth-apt. Nothing else is needed for establishing truth-aptitude.

These consideration carry over, *mutatis mutandis*, to the case of quantification over possible worlds.

THE ROLE OF VERIFICATIONISM. Stalnaker then attempts to defend liberal platonism from the charge that it is modal realism in disguise. The claim is not articulated very clearly. Verificationism is supposed to play some role in grounding that difference. Here is one interpretation of that role. Our reasoning about possibility and necessity should provide us not only with the rationale for a belief in possible worlds. It should also provide us with an idea what possible worlds are. The enquiry about possibilia is not done in the way the enquiry into the nature of material objects is done. There is no commitment within that enquiry to the spatiotemporal nature of possible worlds and merely possible objects.