

## ARE THERE THEORIES?

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We are apt to say things like, "As Copernicus himself noted, the heliocentric theory was not new with him, for it has existed since the third century B.C., when Aristarchus of Samos first thought of it." But what was it that began with Aristarchus of Samos? Heliocentric theorizing, presumably. And what was Aristarchus the first one to think of? Clearly, that the earth moves around the sun, and not the sun around the earth, was what Aristarchus was the first one to think of. To be sure, that the earth moves around the sun, and not the sun around the earth, is a fact. We can call it the heliocentric fact. Aristarchus was the first one to think of — though indeed not yet to prove — the heliocentric fact, but that fact itself certainly did not start with him. For it was a fact that had existed long before he ever came on the scene. And so, what Aristarchus was the first to think of is *not* that which starts with him. As noted previously, that the earth moves around the sun, and not the sun around the earth, is what Aristarchus first thought of. He doubtless thought *also* about thinking that way, but what he thought of primarily was *not* heliocentric thinking, but rather the heliocentric fact itself (though at the time, of course, he did not yet have the right to *call* it a fact).

And so, the heliocentric fact is what Aristarchus first thought of, and theorizing heliocentrically is what he initiated. It would seem that neither of these is the heliocentric theory, if that has to be *both* something which Aristarchus thought of for the first time *and* something which he initiated. The *problem* is to see just what the heliocentric theory could be at all.

(Should we ask at this point what it was that round-earth theorists believed before they started to think heliocentrically? Such a question would appear easy enough to answer. That the sun moves around the earth, of course, is what they used to think then. However, that the sun moves around the earth is not a fact. It would, of course, *be* a fact if that were the situation which does exist; however, that situation does not exist, and as a result it is *not* a fact. To be sure, every fact is an existing fact, but not everything which is believed to exist actually *is* a fact.)

Well then, when all is said and done, *is* there really any such thing as the

heliocentric theory? Ordinary language certainly says there is. Must we decide that ordinary language here is an ass? Or can we *reconstruct* truth-conditions for *theory*-existence assertions? After all, your *lap* only exists when you are sitting down, for instance, but this does not really mean that you wreak any *serious* destruction by standing up. A *lap*'s existence is explicable in terms of states of existence of specific other things which do not usually come to an end, but only change, when that lap (temporarily) ceases to exist.

Now, when it comes to astronomy, apart from the heliocentric fact, there undoubtedly is that eternal platonic "existent", the heliocentric *way* of thinking. (What makes *its* "existence" eternal is just that the mere *logical possibility* of thinking thus is logically sufficient for the "existence", in the relevant sense, of such a *way of thinking*.<sup>(1)</sup>) Then, thirdly, of course, there is also the historical phenomenon which is constituted collectively by concrete instances of that way of thinking. This phenomenon — "heliocentrism" — began with Aristarchus and continues down to our day. Can we not additionally have a fourth "existent" here whose *esse* is *cogitari* — something which is said to "exist" whenever, and for as long as, anybody (occurently or dispositionally) *thinks of* the heliocentric fact as being real or not real, possible or not possible; and, furthermore, which is said itself to be "thought of" thus whenever, and for as long as, it "exists"? Perhaps so, but surely not in the same sense of the expression "thought of" as the sense in which both facts, such as the heliocentric fact, and likewise non-facts, such as its geocentric alternative, are ordinarily said to be "thought of" in any way. (After all, an entity of this new sort would count as *existing* when and only when a corresponding fact-or-non-fact was *in the old sense* being "thought of" in any way; but it seems quite preposterous to propose that, automatically, in thinking in any way of some specific fact-or-non-fact, the thinker would in that way always be in the same sense additionally "thinking of" some *extra* entity of indistinguishably the same description.)

Should we attribute to "ordinary language" the empirical meta-thesis that the use of the expressions "think of" and "thought of" is univocal? If so, it looks as though ordinary language really will be something of an ass here.

(1) Perhaps we strictly should deny that the heliocentric way of thinking is eternal, on the grounds that, before there was this earth to think heliocentrically *about*, there did not exist any logical possibility, even, of thinking that way. Or could someone count as thinking heliocentrically about *this* earth who, prior to that time, expected such an earth would come into being and thought heliocentrically about *it*?

Alternatively, it is not “ordinary language” itself, but only something else closely connected with it (ordinary beliefs about ordinary language?), which should be regarded as being somewhat asinine. At that point, the distinction hardly appears an important one.

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In the perennial, or at least long-lasting, philosophical debate between nominalism and abstract-entity realism, the nominalist side has contested either the existence of *sets*, *numbers* and the like, or else their existence over and above concrete particulars. The project of constructing *numbers* out of *sets* is well known, and for the existence at any rate of non-null *sets* the existence of their members is logically sufficient. But “explication is elimination,” runs a celebrated philosophical dictum,<sup>(2)</sup> and even those hesitant to accept the author’s stated grounds — his rejection of the concept of *synonymy* as ordinarily understood — can easily fail to take due note of the distinction between denying something’s existence and merely denying its existence *over and above* something else. And yet, in the example given above, for instance, the denial of your *lap*’s existence over and above the existence of (facts about) your body and its posture, is not at all a denial of your *lap*’s existence.

In short, the nominalist denial that anything exists *over and above* *concreta* falls short of the stronger claim that nothing *other than* *concreta* exists — or at any rate it does insofar as non-*concreta* such as *sets* and *numbers* can be *explicated* successfully in terms of *concreta*. However, ordinary language appears to commit its users additionally to *intentional objects* like theories, whose ostensible *esse* is *cogitari*. When it comes to these last, in contrast to *sets* or *numbers*, there would seem to be a quite distinct case for eliminationism. As it is spoken of in ordinary language, “the heliocentric theory,” for example, would be something different alike from heliocentric theorizing, the heliocentric way of theorizing, and, lastly, the actual (heliocentric) fact of the matter. It would be something thought of by anyone thinking of that astronomical fact, and yet something other than that fact on account of being coeval, not with that fact, but only with people’s thought about it.

Expressing ourselves, as we admittedly must, in ordinary language, even

<sup>(2)</sup> W.V. Quine, *Word and Object* (MIT Press: Cambridge, Massachusetts, 1960), pages 258-260.

if only just as much as is necessary to formulate any novel way of speaking, *can* we coherently fault ordinary language as radically as the eliminationism suggested would involve? It does not seem altogether obvious that the answer has to be in the negative.

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