49700DTE050

Translation of 49700D0L050, 'De oppositione abbreviata'

Science is about the eternal and necessary: in a Platonic sense, No; regarding God, Yes.

It is about the abstract essences of things: science in potency, Yes; *Met.* 10, 1087a, 15ff.; science in act, No.

It is about the necessary so as to exclude fittingness, No. An empirical law is 'conveniens.'

It is about motion only from the term: No – infinitesimal calculus.

It is not about the 'per accidens': directly, I agree; indirectly – theory of probability, I disagree

we already understand the essences of things: Aristotle and Aquinas often denied this. But they did not positively understand the process itself.

Science is certain knowledge of things through causes. Through causes: yes, if it is understood; certain knowledge: yes, if true judgment. This definition is valid regarding science as perfect, but not about science as in *fieri*.

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[Objection:] Every science is in *fieri*, and therefore there is no scientific certitude. Resp: every science is in *fieri* in some way: I agree; but so as to exclude all scientific certitude, I disagree.

In general, scientific progress consists in the ? of hypotheses, and commonly hypotheses are verified only indirectly.

Specifically: (1) $F = G m_1 m_2 / d^2$

insofar as Euclidean space is supposed

insofar as it is presupposed that mass is a fundamental mechanical notion, but the correlation is valid in this sense, that every future science will preserve it directly or indirectly within the verified limits of approximation. (2) the periodic table: the conception of the atom is not yet clearly attained, but every future science will preserve the verified relations among the roughly 100 elements and more than 300,000 compounds.

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(3) the fundamental circle

 (α) is a natural habit of principles that does not have to be discovered, understood, judged; it is had from the very dynamic structure of the mind; thus it operates naturally in every human being and is inevitably employed by them;

 (β) nonetheless, it is not an explicit habit

unless there has emerged a sociocultural development from which the age of myth, where the natural habit is potential and there thrives the logic of imagination and symbol [sequence uncertain here];

 (γ) nor is the habit explicitly acknowledged as fundamental unless there has occurred a philosophic conversion; that is, in the first use of the symbolic circles of operations, the infant and child returns to previous sensori-motor circles as to sure foundations by which one governs one's body and sees, touches, and manipulates things. Philosophic conversion is the transference of the foundation from the circle of sensori-motor operations to a circle of experience, understanding, and judging.

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(δ) also, given the explicit knowledge and rational acknowledgment of the fundamental circle, there is further required a scientific development so that the properties and differentiations be clearly illumined;

(ε) therefore from the beginning of philosophy there has been a perennial philosophy which continually perceives the philosophical and metaphysical foundations more clearly; we have already said what is meant by 'perennial philosophy.'

(ζ) therefore we must say that (α) the fundamental circle as a natural habit always is operative and is somehow naturally acknowledged; (β) with the development of the human spirit it is ever more clearly and fully known and acknowledged; (γ) in itself it is inevitable and irrevisable, and can be known with certainly as such, with that degree of clarity that corresponds to the development that has been attained; (δ) it escapes the revisability that belongs to the law of gravity and the periodic table because (1) consciousness of oneself as experiencing, understanding, judging is not an indirectly verified hypothesis; (2) the circle is presupposed in every revision of any theory whatsoever.