

Science, knowledge and Phylosophy

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Whatever the field of activity of the scientific work, reflection on the work, the existential foundations, and social supports and cultural objectives that explain can not stand apart from the intellectual interest of the researcher. He must know the nature of his work, because it represents its own individual reality.

The scientific research is the culmination of an extremely complex process by which man achieves his supreme existential possibility, that gives content to rationality: the ability to dominate nature, to transform it and adapt it to their needs. This process, accumulated over time, is **knowledge**. It extends from the beginning of biological evolution to higher forms of animal development, and in its superior manifestation, is revealed by the emergence of ideas of human consciousness. Such ideas, in the highest stage, will result on implementing the scientific research, whose ultimate purpose is to provide awareness of new ideas, representing unknown content of external reality. So is continued the advancement of human knowledge.

We can distinguish three major stages of knowledge: the stage of the primary reflexes, the stage of knowledge, and the stage of science. The critical theory of knowledge must admit fundamental assumptions: knowledge is a general property of men and, in all its forms, it is always a reaction of living matter in the face of the surrounding world. At first, there is the perception of the objective situation and then the reaction to this situation, forming so a reflex arc. Knowledge, which is a property of living matter, reaches the acme of perfection when the man rises to the level of SCIENCE. This is defined as systematic knowledge. Knowledge alone does imply a methodical qualification, and so it may produce results that incorporate rational science. By becoming methodical, knowledge gets an upgrade on quality.

Therefore science is a methodical and organized investigation, in fact, it discovers the essence of beings and of phenomena and the laws that govern them, in order to seize the properties of things and natural processes for the benefit of man. Scientific knowledge, by relying on the method, is acquired based on rules to explore the physical and social reality. The rules of the method indicate the way to experimentally act on the phenomena, in order to investigate them and take their intelligible content.

The man of science, reaching the higher plane of knowledge that engages, develops ideas into experiences that later will proceed in the practical operation about the beings

or phenomena. Before acting on them in the lab he develops an experimental pilot project, and even calculate the probabilities of the results it provides. It is not a vague speculation, but what one might call the moment of geniality, which is the preview of a combination of phenomena. The mere fact of having conceived questions and ideas makes him great.

The methodical nature of science completes the perfect circle of knowledge, which is the succession and mutual interpenetration of the two-stage process: INDUCTIVE (afferent, perceptual, ideational, conceptual, synthetic) and DEDUCTIVE (efferent, conclusive, particularizing, analytical).

In the simple step KNOWLEDGE there is no of the summarized traces below: a) intentional induction as a consequence of deliberate installation of new situations; there is no experimental testing, no base in inductive movement, which will depart from reality to the thought. b) there is only the automatic perception of objects and situations, but not intentional demand, which only happens in the science phase, precisely because methodical attitude is lacking. Only this institutionalizes induction and deduction. c) finally, in the stage of simple knowledge, a category without method, there is no transition from induction to deduction. The people spontaneously think in logical terms and are able to practice their fundamental acts. They do not have the science of the procedures of thought itself, because they do not reach the level of scientific knowledge.

Only on the scientific stage of knowledge man achieves the top and perfect phase, in relation to stage of humanization: one in which man becomes a conscious creator of science, becoming himself able to do relevant questions, proceed deliberately the choice of procedures and ideas that will deliver the objectives, and outlines the desire to dominate the natural and social world in order to make it more favorable to human life. Science only reaches the maximum degree of perfection when it becomes the product of critical consciousness of the researcher. Finally, all scientific work, whatever the area of knowledge, must always have a social purpose, for the benefit of the community and humanity. In health field this is even more true.