

(1) The Theological stage refers to explosion by personified deities. During the earlier stages, people believed that all the phenomena of nature are the creation of the divine or supernatural. Adults and children failed to discover the natural causes of various phenomena and hence attributed them to a supernatural or divine power. Comte broke this stage into 3 sub-stages:

1A. Fetishism – Fetishism was the primary stage of the theological stage of thinking. Throughout this stage, primitive people believe that inanimate objects have living spirit in them, also known as animism. People worship inanimate objects like trees, stones, a piece of wood, volcanic eruptions, etc. Through this practice, people believe that all things root from a supernatural source.

1B. Polytheism – At one point, Fetishism began to bring about doubt in the minds of its believers. As a result, people turned towards polytheism: the explanation of things through the use of many Gods. Primitive people believe that all natural forces are controlled by different Gods; a few examples would be God of water, God of rain, God of fire, God of air, God of earth, etc.

1C. Monotheism – Monotheism means believing in one God or God in one; attributing all to a single, supreme deity. Primitive people believe a single theistic entity is responsible for the existence of the universe.

The classification of the sciences and philosophy of science

The second pillar of positive philosophy, the law of the classification of the sciences, has withstood the test of time much better than the law of the three stages. Of the various classifications that have been proposed, it is Comte's that is still the most popular today. This classification, too, structures the Course, which examines each of the six fundamental sciences—mathematics, astronomy, physics, chemistry, biology, sociology—in turn. It provides a way to do justice to the diversity of the sciences without thereby losing sight of their unity. This classification also makes Comte the founder of the philosophy of science in the modern sense. From Plato to Kant, reflection on science had always occupied a central place in philosophy, but the sciences had to be sufficiently developed for their diversity to manifest itself. It was thanks to his education at the École Polytechnique that Comte, from 1818, began to develop the concept of a philosophy of science. At about the same time Bolzano wrote his *Wissenschaftslehre* (1834) and Mill his *System of Logic* (1843), Comte's Course presented in

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sequence a philosophy of mathematics, of astronomy, of physics, of chemistry, of biology, and of sociology. Comte's classification is meant not to restore a chimerical unity, but to avoid the fragmentation of knowledge. Thanks to it, the sciences are related to one another in an encyclopedic scale that goes from the general to the particular, and from the simple to the complex: moving from mathematics to sociology, generality decreases and complexity increases.

The law of classification of the sciences also has a historical aspect: it gives us the order in which the sciences develop. For example, astronomy requires mathematics, and chemistry requires physics. Each science thus rests upon the one that precedes it. As Comte puts it, the higher depends on the lower, but is not its result. The recognition of an irreducible diversity already contains a disavowal of reductionism (in Comte's wording: 'materialism'), which the classification allows one to make explicit. The positivist clearly sees that the tendency towards reductionism is fed by the development of scientific knowledge itself, where each science participates in the evolution of the next; but history also teaches us that each science, in order to secure its own subject matter, has to fight invasions by the preceding one. 'Thus it appears that Materialism is a danger inherent in the mode in which the scientific studies necessary as a preparation for Positivism were pursued. Each science tended to absorb the one next to it, on the grounds of having reached the positive stage earlier and more thoroughly.' (1851, v. 1, 50; E., v. 1, 39)

While philosophers of science have always recognized the place of Comte in the history of their discipline, the philosophy of science presented in the *Course*, and a fortiori the one in the *System*, have hardly been studied (Laudan 1981). Comte's philosophy of science is based on a systematic difference between method and doctrine. These are, to use Comtean terminology, opposed to one another, as the logical point of view and the scientific point of view. Method is presented as superior to doctrine: scientific doctrines change (that is what "progress" means), but the value of science lies in its methods. At the level of doctrine, mathematics has a status of its own, well indicated in the second lesson, where it is presented last, and as if to make up for something forgotten. As much as it is itself a body of knowledge, it is an instrument of discovery in the other sciences, an 'organon' in the Aristotelian sense. Among the remaining sciences, leaving sociology aside for the moment, two occupy a pre-eminent place:

Astronomy and biology are, by their nature, the two principal branches of natural philosophy. They, the complement of each other, include the general system of our fundamental conceptions

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in their rational harmony. The solar system and Man are the extremes within which our ideas will forever be included. The system first, and then Man, according to the course of our speculative reason: and the reverse in the active process: the laws of the system determining those of Man, and remaining unaffected by them. (1830 (40), v. 1, 717–718; E., v. 1, 384)

The positive method comes in different forms, according to the science where it is applied: in astronomy it is observation, in physics experimentation, in biology comparison. The same point of view is also behind the general theory of hypotheses in the 28th lesson, a centerpiece of the positive philosophy of science.

Finally, classification is the key to a theory of technology. The reason is that there exists a systematic connection between complexity and modifiability: the more complex a phenomenon is, the more modifiable it is. The order of nature is a modifiable order. Human action takes place within the limits fixed by nature and consists in replacing the natural order by an artificial one. Comte's education as an engineer had made him quite aware of the links between science and its applications, which he summarized in an oft-quoted slogan: 'From science comes prevision, from prevision comes action'. Only death prevented him from writing the *System of Positive Industry, or Treatise on the Total Action of Humanity on the Planet*, announced as early as 1822.

(2) The Metaphysical stage is the extension of the theological stage. Metaphysical stage refers to explanation by impersonal abstract concepts. People often tried to believe that God is an abstract being.[1] They believe that an abstract power or force guides and determines events in the world. Metaphysical thinking discards belief in a concrete God. The nature of inquiry was legal and rational in nature. For example: In Classical Hindu Indian society the principle of the transmigration of the soul, the conception of rebirth, notions of punishment were largely governed by metaphysical uphill.[1]

(3) The Positivity stage, also known as the scientific stage, refers to scientific explanation based on observation, experiment, and comparison. Positive explanations rely upon a distinct method, the scientific method, for their justification. Today people attempt to establish cause and effect relationships. Positivism is a purely intellectual way of looking at the world; as well, it emphasizes observation and classification of data and facts. This is the highest, most evolved behavior according to Comte.[1]

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Comte, however, was conscious of the fact that the three stages of thinking may or do coexist in the same society or in the same mind and may not always be successive.

Comte proposed a hierarchy of the sciences based on historical sequence, with areas of knowledge passing through these stages in order of complexity. The simplest and most remote areas of knowledge—mechanical or physical—are the first to become scientific. These are followed by the more complex sciences, those considered closest to us.

The sciences, then, according to Comte's "law", developed in this order: Mathematics; Astronomy; Physics; Chemistry; Biology; Sociology. A science of society is thus the "Queen science" in Comte's hierarchy as it would be the most fundamentally complex. Since Comte saw social science as an observation of human behavior and knowledge, his definition of sociology included observing humanity's development of science itself. Because of this, Comte presented this introspective field of study as the science above all others. Sociology would both complete the body of positive sciences by discussing humanity as the last unstudied scientific field, and would link the fields of science together in human history, showing the "intimate interrelation of scientific and social development".[3]