

SCIENTIFIC KNOWLEDGE AND RELIGIOUS KNOWLEDGE - SIGNIFICANT EPISTEMOLOGICAL REFERENCE POINTS

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The separation between the natural and supernatural, which was even contoured from antiquity through the method of doubling truth (one for the natural order and another for the supernatural), is accentuated in modernity. The atomization of the natural by the supernatural and the conferment of primary authority to natural knowledge, which explains itself without appealing to God, constitutes the center of modernity. God is replaced by nature in the explanation of the world.

In a traditional society science is integrated in a general approach of searching for the Truth of the world. Science bears the imprint of sacrality and affirms the existence of certain symbolisms that are intrinsic to the world, the creation having a spiritual foundation. This sacred science does not have a fragmented, sequential representation of reality, but rather approaches the natural in its entirety. Physical phenomena are not atomized and studied in and of themselves, but correlated together, therefore obtaining a perspective of nature's ensemble.

The uncertainty principle of Heisenberg made scientific truth no longer perceivable in a fixist way, as a concept that can be conquered through empirical experiments, and through quantification of the observations in a set of mathematical regulations. The researcher is implicated existentially in the action of study, and having the consciousness that the truth cannot be exhausted by a methodology, however well it might perform. The permanent change of one resultant with another in the framework of

the scientific course does not mean a relativization of the truth, but a differentiated participation in one and the same truth, and maintaining his consciousness that it can never be absolutely attained. In this perspective the limit becomes a chance, because the consciousness of the limit present in the scientific course realizes the creation of an epistemological framework that is favorable for dialogue. The researcher is disposed to accept the dialogue and other forms of knowledge.

1. The Constitutive Principles of Modernity

1.1. The Premises of Modernity

The foundational prejudice of modernity is the illusion that modernists have of believing that they have invented their own tradition, that they are the first, and that they have been saved from the past. The conviction of those from the 17th century, of classic modernism, is that they had emancipated themselves from the tutelage of the ancient traditions that had existed until then. Bernard of Chartes (who died between 1126 and 1130) launched the metaphor of the midgets standing on the shoulders of giants, according to whom modernists were nothing but a few midgets weighing down the shoulders of the giants, who were considered to be the ancients, from antiquity.

This metaphor became reversed. Therefore, Francis Bacon considered the ancients to be youth, and the modern times were viewed as being truly ancient. Descartes, the one who contributed to the realization of modernity's philosophy, says that, "we are the ancient," interpreting the metaphor of the midgets standing on the shoulders of giants in the opposite way. The same thing happened with Newton, who in his letter to Hooke on February the 5th, 1675, omitting the word *midget*, transformed Bernard from Chartres' affirmation into praises.

Those in the Middle Ages considered themselves modern in comparison to those from antiquity. It was modernity obtained through relationship with another epoch. Modernity, properly speaking, is revolutionary in the fact that it considers itself modern by its very content, rather than in comparison with a different paradigm of the world. Modernity has the pretensions that it offers a different view of the world, different than everything that has been, and that this representation of the world is superior only through the simple fact that it is modern, in the sense that it is ulterior to the other conceptions. Modernity permits a major uprootment from universal life and of the idea of Tradition. Gianni Vattimo says that modernity is the epoch in which being modern has become a determinant value.

The separation between the natural and supernatural, which was even contoured from antiquity through the method of doubling truth (one for the natural order and another for the supernatural), is accentuated in modernity. The atomization of the natural by the supernatural and the conferment of primary authority to natural knowledge, which explains itself without appealing to God, constitutes the center of modernity. God is replaced by nature in the explanation of the world. Natural laws can explain the functioning and understanding of the world. In 1660 the *Royal Society of London for the promotion of natural knowledge* is founded. Joshua Childery publishes a manifesto entitled "Baconic Britain," in which he makes a net separation between the natural and

the supernatural. He writes, “attribute to Nature the things that are Nature’s; and attribute to God the things that are God’s.”

H. R. Patapievici, in his work *Omnia Recentia*, synthesizes steps of knowledge, beginning with the relationship between the natural and supernatural. In the first phase thinkers attribute everything to God. In the second step, they believe that natural things are nothing other than symbols of supernatural realities. The third step is the separation of the natural from the supernatural, considering that there are two specific and legitimate methods of investigation for the two domains. The fourth step consists in the recognition of a single method of investigation, only a single form of knowledge, the scientific, and that it is absurd to believe that there is also a different domain of existence. The supernatural can no longer be thought of, as such; it ceases to be possible to exist.

The autonomy of the world is one of the constitutive principles of modernity. It is a world that is independent of God, which has its own natural laws, which is capable of being explained through them. It is a world in which the principle “God is dead” is developed. The belief that the world is an enclosed system that has a self-sufficient ontology, validating itself by itself, will lead to the idea that God is a hypothesis that is appealed to only when there is no other reasonable explanation for autonomous, natural reason. The myth of progress specific to modernity gives the illusion that with time, at a certain point, ignorance will be completely surpassed. Therefore, one day it will all be explained. The world’s autonomy and the absolutization of scientific objectivity, autonomous from Tradition, are principles that change and form the imaginary modern world. The passage from a society anchored in Tradition to a modern one can be explained especially by the changing of the imaginary.

1.2. The Relationship between the Reformation and Modernity

There exists a very close relationship between the Reformation and the spirit of modernity. The historian of religions, Ioan Petru Culianu, sustains that the enforcement of modern science owes to the external factor of the Reformation. The modern spirit was not generated by the transformation of an economic, political, social, or technological order, but especially by the Reformation that took over and accentuated the rationalism of the Renaissance; its anti-clerical character and its priority of the written word to the detriment of images on the plane of knowledge. In fact, we assist a true censorship of the imaginary in the framework of the Reformation. Paradoxically, the counter-reformation, the Roman-Catholic movement, whose purpose was to battle the Reformation, sided with the great censorship of the imaginary, favoring victory for the modern spirit.

Culianu names modernity a “secularized appendage of the Reformation,” revealing that the modern spirit determines, “...a puritan epoch on the moral level, capitalist on the economic level, evolutionist on the philosophical level, contestant on the ideological level, reformist on the political level, scientific and technological on the practical level.”

The victory of the Protestant principle *Sola Scriptura* confirms the mutation that took place in modernity: the replacement of thoughts based on images with thoughts based

on words. In the traditional world, the image constituted a living presence and could better present that which was tied to the world. Even at the level of knowledge, image played a central role. The Reformation moved the accent on the word and especially on the written word. Authority is accorded to the written word. *Sola Scriptura* becomes a fundamental principle of modernity. It is not by chance that typographies and editions of books with indexes were developed first in the Protestant world.

1.3. Scientific Knowledge in the Traditional and Modern Paradigm

The scientific vision of the world is closely tied to the mentality of the epochs in which it was elaborated. In a traditional society science is integrated in a general approach of searching for the Truth of the world. Science bears the imprint of sacrality and affirms the existence of certain symbolisms that are intrinsic to the world, the creation having a spiritual foundation. This sacred science does not have a fragmented, sequential representation of reality, but rather approaches the natural in its entirety. Physical phenomena are not atomized and studied in and of themselves, but correlated together, therefore obtaining a perspective of nature's ensemble.

For example, in antiquity physics was considered a science of nature, without a restriction to only certain aspects of nature's phenomena being forced onto it. The most general laws of nature were studied without having a specialization that insisted on certain concrete nuances, specific to certain physical phenomena.

Modern science deviates from the integrating concept of the traditional mentality. It fragments physical phenomena into a multitude of sequences. Therefore the analytical and discursive spirit of modern thinkers will dissect physical phenomenon, arriving at a so-called specialization, which will only approach a certain aspect of the respective phenomenon. This segmentation will narrow the horizon of the understanding and penetration of reality, the researcher being subjugated to a multitude of details.

The accumulation of many more details attenuates the significance of the studied phenomenon to the point of its dissolution. The mysterious dimension of the symbol is lost. Modern science loses the blanketing and transcendent dimension of the reality that is being studied, insisting primarily on the visible aspect. In this way the mystery is eluded and they pass from a qualitative aspect to one that is quantitative.

If traditional thinkers understood theory as a true contemplation, the modern researcher appreciates research as an analytic exercise of a few minds, autonomous from transcendental reality. The traditional method accords primacy to the spiritual foundation of existence, starting from the ground up and capturing the essence of the studied phenomenon. Modern science will abdicate from such a vertical approach of reality and insists on the external aspects of the object of research. Even if the multiplicity of a phenomenon's aspects that is studied by modern science, scattered into a sum of specializations, could be reunited into a single conception, in modernity it is impossible to arrive at the equivalent physics from antiquity. And this is because ancient science was in a search and rediscovery of meaning, of the ultimate principle, while modern science searches for certain particular laws, and believes the human mind has invented them.

Modern mentality proclaims in an absolute manner the validity of the principle of individuality. In this context, the results of modern science give potency to human pride. Researchers are considered original, having the illusion that the laws they discovered are their own inventions. In the traditional world, on the contrary, not one thinker attempted to demand ownership of an idea. In the case where he wanted to impose an individualistic conception, the respective theory lost its authority. The force of an idea was not given to its originality, but to the fact that it was recognized as true by many people. In the contrary case it is false and even if it is an original idea of remarkable individuality, it represented nothing other than a speculative fantasy. Truth is an expression of communion. Modern science attempts to invent truths, while traditional science considered the Truth to be transcendent to our world and the only thing that remained for us to do was to recognize it and to partake of it.

Modern science renounces the intuition that existed in traditional sciences, moving the center of gravity from the qualitative to the quantitative. Through the loss of the symbolic vision of existence that is in traditional science, in modernity we have arrived at believing that it is impossible to develop science where measurement cannot be introduced. This tendency became evident with Descartes and even though he proved the setback of Cartesian physics, he did not renounce quantitative methods. The quantitative methods of modern science impose a nearly instinctive utilitarianism and pragmatism. In these conditions, a scientific finality that surpasses the horizons of the immanent world can no longer be discussed.

Mathematization of the truth expresses the rupture between traditionally scientific thought, and the modern. By turning geometry into algebra, Galileo and Descartes impose truth as being mathematical by nature. Until the imposition of the modern mentality into scientific thought, geometry expressed the harmony and coherence existent in nature more clearly. In this way the universe was perceived by the researcher as a true cosmos. At the same time that analytic geometry was developed by Descartes, the deep significance of geometry was lost; its character of the introspection of reality. Through geometry the world was blanketed in symbols, deep meanings of existence, giving a special significance to creation. The passage from geometry to algebra marks the movement from qualitative to quantitative, from the implicit to the explicit. Algebra attempts to disclose the essence of physical phenomena through mathematical formulations. And these formulas, dominated by quantitative aspects, remain exterior to the depths of natural phenomena.

The modern mentality, renouncing the religious substantiation of existence will attempt to reconcile Revelation with scientific hypothesis. Scientific research is no longer anchored in a framework determined by Revelation, as in the traditional world, but on the contrary, the approach is inverse: religion is forced to accommodate itself to the data of modern science. In these conditions not only science loses its sacred dimension, but theology betrays its true vocation, borrowing from modern science a methodology that is not its own.

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Biographical Sketch

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