On the Accordance of Religious and Scientific Cognition Mechanism

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There are various differences and contraries, sometimes, even a vehement collision between religion and science. However, to the understanding of objective things, the cognition principles which the two follow are almost unanimous. Basically, mature religions have established complete theology systems, which are one of the means of human cognition, considering objective reality as cognitive basis, following cognitive universal rules and full of rationality and irrationality through the cognitive process as well as science.

Keywords: religion and science, cognition mechanism, accordance, synergistic development

Introduction

As products of practice, religion and science have the same historical root. In the early days of human history, religion and science stayed in a symbiotic situation, in which religion and science were fusion and could not be distinguished from each other, that is to say, the other side permeated into their respective interior. In primitive religion, there were some reasonable experience and thinking seeding which were accumulated in human life and production. On the other hand, in primitive science, there were some mysterious factors of human fallacious knowledge on outer world and human self. However, in the history of human cognition, there was dynamic asynchronism when the two played their roles independently. Russell said:

Religion and science are two aspects of social life, the former had been very important when we knew a little about human thought history, while the latter suddenly jumped on an important position in 16th century after appeared flickeringly in Creeks and Arabs, and it brought more and more tremendous influence to the thought and system which we live in from that on. (Russell, 1982, p. 1)

The changes of human cognitive history was divided into three stages of logic development, religion, metaphysics and substantiation by August Comet who thought,

The stage of religion (or theology) is the time of myth thought and understanding, the stage of metaphysics is the time of organizing experience world with objective abstract reason and concept, and the stage of substantiation is the time of development of modern scientific cognition and the pattern of ideological structure. (O’Dea & Aviad, 1990, p. 78)

That is to say, human ideological experienced a series of continuous transition from religious theology, philosophy to modern science.

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The unanimity of cognition mechanism is interior chance and concrete manifestation of accordant and synergistic development between religion and science, if the same history root and the sequence of development are some exterior lucky chances. The common characters of cognition mechanism between religion and science mainly embody following aspects: objective nature and current reality are cognitive objects of the two; their cognitive processes all follow basic rules of cognition and universal laws of thinking; both of them discover truth and promote human’s constant advancement and comprehensive development.

**Objective Nature and Current Reality are Cognitive Objects of Religion and Science**

Knowing and transforming nature and improving current realistic society are considered as realistic basis and the power of development of science. Joseph Needham thought: In 16th century, science was named “magic of nature” (Needham, 1990, p. 36). “One of essential preconditions of the development of science is recognizing nature, but not evading it” (Needham, 1990, p. 459). As for religion, Ludwig Feuerbach pointed: “nature is not only original object of religion, but also its constant basis, latent and permanent background” (Feuerbach, 1999, p. 10). It can be seen from these that objective nature is inevitable cognitive object of religion and science.

The purpose of cognition is discovering truth, of course, the cognitions of religion and science are included. Whitehead thought: “religious creed is trying to explain the truth which show in human experience of religion with precise terms, on the contrary, the tenet of physics is trying to use precise terminology to clarify the truth which shows in human sense experience” (Barbour, 1993, p. 265). No matter human experience of religion, or sense experience, undoubtedly take the current real world as the basis of cognition. John Dewey ever pointed: “cognition, which includes science knowledge, itself, not outside of social activities, is a form of social behavior as agriculture or transportation is a form of social behavior” (Dewey, 1965, p. 11). So, as two kinds of different cognitive style, religious and scientific ultimate objectives are respectively exploring boundless spiritual world and physical world, not only inherently include scientific knowledge, but also both take objective existence as base, that is to say, their cognitive content can not beyond or break away from objective real world. This is not only because cognition is empty of meaning unless itself is knowledge of objective realism and exploration to inherent inevitability of realism, but also for that the cognitive subject, object, measure and outcome have all branded mark of the times and become production of the times. In term of spiritual religion, Marx ever pointed out: “religion itself has no essence or realm”, but if people “really want to talk about the essence of religion, that is to say, talk about material basis of this imaginary essence, so, he should not search for the essence in human essence or God’s object, but only in the ready-made material world in every stage of religious development” (Marx, 1960, p. 170). So, specific religion and science both basically take approximately same history realism to the base of cognition, and realism is a remarkable commonness of theirs.

There is inherent reasonableness in the objective reality of religious cognition. The normal often feel the finiteness and faultiness of the current world while this kind of spiritual pursuit to the infinity and perfect is human rational dream which acknowledges the supremacy of life all the time. The self-conflict in cognition will inevitably lead to people’s dissatisfaction and changing to the real world which is not fit for people’s purpose as well as expectation and reconstruction to the eternal and meaningful new world. However, human limited sense can not achieve limitlessness by rational way. Therefore, the faith beyond rational understanding is bound to become the only way by which people can cognize and grasp the infinite and perfect. Ludwig Feuerbach pointed
out: the faith liberates human dream from the shackle of natural logos, promises what nature and logos do not permit and brings happiness to people because it meets people’s most subjective desire (Feuerbach, 1999, p. 177). These result in religious paradox in epistemology, rational thinking leads to non-rational faith and the meaninglessness of the finite leads to the ultimate concern of the infinite. Just as professor Sun Yiping said:

Rationally thinking the current limitation of human existence and constructing the faith beyond secular world and towards the sacred other side are the core teachings of all religions.” “The most essential feature of religion is that it reveals a limited nature of the existence of human, and an eternal pursuit to the ultimate sacred the limited human. (Sun, 2002, p. 10)

We know from above, in cognition, religion was born from the thinking of people about the limitation and non-meaning of the current being, looks forward to achieving the ultimate concern to human by structure a sacred faith which corresponds with the purpose of life in idea. In real life, the faith not only contents the lasting and strong desire which is inherent in human, but also in spirit, compensates for some deficiency and a sense of helplessness. The ultimate faith is a human natural demand of sociality and a vital function of physiology and psychology. For this reason, Muller said: “Just like that the talent for speaking has nothing to do with any language formed in history, human has a talent for faith which has nothing to do with any religion formed in history” (Muller, 1989, p. 11).

Although religion life begins with faith and finishes up with the sacred visionary kingdom of heaven, as a theory system used to know the world by human, all of the elements of its cognition mechanism are based on the stable reality. Even if sometimes it distorts reality, it is not an empty thinking entirely divorced from reality. Because “in a sense, every religion is true and viable, every religion harmoniously coexists with language, thinking, feeling at the time to adapt with the times” (Sun, 2002, p. 38). “No matter where is a religion from, it always has sacred intention. No matter how imperfect, how babyish and so on, a religion is always on behalf of people’s highest ideal about perfect which people can reach and grasp in spirit at that time” (Muller, 1989, p. 129). The realism of religious cognition not only shows the objectivity of religious existence, religious credibility and rationality as a special weapon which is used to know the world by people, but also shows the religious understanding of the world is not static, but a constant gradual process of development. Different religions, as well as a religion in different periods would show different cognitive object. For example, Christian relief is focused on helping others, but Taoism puts more emphasis on self-help. Early Taoism advocated physiological nursing of body to become immortal, but the latter put more emphasis on training of inner energy of life to correspond with Tao.

As opposed to religion, scientific reality is easier to understand, because science and technology directly point to the realistic objective physical world and make a deep impact on the nature and all human society at any moment. If religion endues life with the ultimate meaning on the beyond aspect, then science should achieve the realistic mission of life on the secular aspect. Religion pursues the internal liberty, while science pursues the external liberty. Both of them like twin angels coming from heaven to meet people’s sacred and secular, transcendental and realistic needs in spiritual and physical world, so inevitably, both of them have realistic objective content. The reality of religion mainly presents in transcendental cognition on reality, while science’s presents in serving realistic utilitarian practice. On the terms of epistemology, religion and science are recognition and fulfillment to the universe solemn order. The ultimate meaning is given to human life mainly in
the ontology by religion, but the main work of science is revealing the interrelation of the realistic world to improve the state of basic human existence. That is to say, the certain part which is known is realized by science, while the majority of the uncertainty of the unknown has become the cognitive domain of religion. Due to the limited level of scientific cognition and the infinite cognitive object of science, the human ignorance to the unknown world is also rapidly expanding when the science constantly nibbles it for the unknown is always more than the known, that is why religion and science can get along with each other.

**Religion and Science Follow the Universal Rule of Cognition**

The cognitive activities of religion and science are realized through the dynamic reflection of subject to the object. The subject is a realistic man who has a healthy body and natural ideation, lives in a certain social relationship, and takes part in the current social practice. In cognitive activities, the influence of the spiritual foundation of subject is deeper than physiological. The spiritual basis mainly includes the cognitive structure consisted of the background of knowledge, values and thinking pattern and the irrational factors consisted of feeling, will, intuition, inspiration, guess, hypothesis and so on. The object is cognitive object which has objective reality and exists in the range of the cognition of the subject. It is an opposed concept to the subject, which has some characters include objectivity, pertinence and social historicity, etc and develops with the development of the subject and the level of the cognition of times. Cognitive process of the subject toward the object must go through the continual advancement and development. Perceptual knowledge is a kind of unilateral knowledge toward the phenomena of things and the external linkages by the subject directly taking in the relevant information coming from the object, while rational knowledge is a kind of more comprehensive knowledge toward the nature of things and internal relation by the subject processing the relevant information in thinking. Perceptual knowledge and rational knowledge are different stages of awareness which have different quality in the process of unifying knowledge, are the most basic form of all the activities of cognition, but not all. The cognition principles and thinking rules such as perceptual knowledge up to rational knowledge, finding out the nature through the phenomenon and so on, are not only followed by the activities of scientific understanding, but also the basic rules of the activities of religious knowledge. Religion is not a naturally occurring, but a unique history and culture phenomenon to human society. Religion is rational attempt that human out of the animal kingdom try to use the sacred power of religion to make their living environment have more orders when they face the chaos and disorder of nature and human society. It is clear that religion is not a sudden phenomenon appeared in an overnight, but a gradually evolving process. Only when the original human develop to have a certain degree of imagination, thinking ability and social organization ability, and show the feeling of reverence and dependence to the incredible natural phenomena, religion will come into being, that is to say, religion itself is the produce of the development of human cognition. In terms of religious deity worship, a few stages of religious development such as nature worship, polytheistic worship and the supreme god or the only god worship have clearly indicated the development of religious cognition on deity worship. Nature worship shows that the level of thinking of the cognitive subject is low in the early time, so human can only perceptually and intuitively worship natural object which has close association with their survival, and this kind of worship is basically on the stage of low-level cognition which gives priority to perceptual knowledge and is supplemented by rational knowledge and only grasp the phenomenon of the object. With the enhancement of thinking ability of
cognitive subject and advancement of the level of abstraction, human can distill notional spirit object, which is a higher stage of the development of cognition from nature worship up to pantheism, and then further abstract the most intrinsic connotation from a variety of spirit objects, that is, from pantheism to the supreme god or the only god worship, which is the senior stage of cognition giving priority to rational cognition and directly exploring the intrinsic attribute and the inevitable result of the development of thinking. From nature worship to pantheism, then to monotheism, not only showed the intrinsic trend and rule, but also indicated that religious activities of cognition followed the basic thinking rules, which is same to the scientific activities of cognition, from the perceptual to the rational, from the visual to the abstract, from the phenomena to the nature. Thinking rules are basic forms of cognition, and they have objective and inherent inevitability. The main function of thinking is turning an objective external object into the inner subjective spirit, and making the knowledge and grasp of the subject to the object true when the two mingle each other.

In addition, religion and science must consciously abide by the universal law of logical thinking when they build the theoretical systems of themselves. Aristotle said: “The concept is not congenital, but built up according to several self-evident principles (for example, the principle of cause and effect) and sensory material. The knowledge of God is not congenital, but can be achieved after rational and hard reasoning” (Dampier, 1975, p. 140). This is because, “If there is lack of consistency between the theory and the material explained by it, whether scientific theory or religious explanation will not be recognized by people”, so, “both religious explanation and scientific theory make their efforts to become a logical system which has no inherent contradictions, and strive to follow the basic attributes of human thinking, which is no contradictions in thinking” (Pan, 1999, p. 300).

The Cognitive Processes of Religion and Science are Rational as Well as Irrational

It is worth noting that there is a more popular view that science is rational for the emphasis on the fact and evidence, while religion is irrational for the emphasis on the value and belief. There is nothing wrong in this way itself that define the dividing line between the natures of religion and science from the view of epistemology, even it is seemed to be justified at first glance. But considering rational and irrational as the result of the dividing line between religion and science is still much too simple and arbitrary. On the one hand, because religion is a way of thinking, and thinking contains the corresponding rationality. Feuerbach pointed out: “Each particular religion, every faith manner, at the same time, is a way of thinking.” On the belief, “Only when people no longer live in harmony with their faith, and no longer feel and think in this kind of harmony, that is, when the belief cease to be the truth embedded in people’s heart, the conflicts among belief, religion and reason will in particular strongly highlight.” “Only for those who do not believe, the object of faith is inconsistent with reason. Once you believe the objects of faith, you will be convinced of their truth and acknowledge that they are the highest reason” (Feuerbach, 1984, p. 2). Dampier also warned: “If we think that the experiential philosophy and what it produced later, the orthodox Roman theology, argue against or belittle human reason, it would be totally wrong” (Dampier, 1975, p. 141). As a mature theology often has get rid of the subjective design of religion and the composition of emotion involved, while appears as a religious philosophy, such as “Christians use the concept of Greece to describe Jesus not only as a savior, Christ, but also as the personalized and scared logos, that is a kind of sacred and rational description” (O’ Dea & Aviad, 1990, p. 84). On the other hand, in epistemology, science often uses the irrational to serve the rational purpose of cognition just like that religion often uses the rational to serve
religious purpose. For this reason, in Kant’s *Religion within the Limits of Reason Alone*, religion and science are all rational. The religion based on the ethical practice is a practical reason, while the science based on the theory is a theoretical reason. In real life, practical reason is concerned with higher priority than theoretical reason. Moreover, in the context of much limitation in cognition, there is intercross and diacritic relativity between the reason and unreason.

In fact, the crux of the matter is whether science needs belief. In most people, this is a rather absurd and silly question, because scientific rationality and the irrationality of belief are clearly incompatible just as ice and hot coals. However, quite a number of successful scientists support a different view that science can not be separated from religion, and belief can urge reason to improve. Einstein once said: “Science can be only created by those who pursue the truth with their whole hearts and yearn for understanding things, but the source of such feeling comes from the area of religion. The belief belong to the same source is that those people believe that the laws which are effective to the real world are sensible, that is to be understood by reason. I can not imagine that a true scientist has no such a deep faith. This situation can be likened to an image: science without religion likes a cripple, and religion without science likes the blind” (Einstein, 1979, pp. 182-186). For this reason, there is a strong interdependence between religion and science. “The more forward evolution of human spirit, the more we can definitely say that the road to the true feeling of religion is not the fear of life and death or blind faith, but the pursuit of rational knowledge” (Einstein, 1979, pp. 182-186). It can be seen that there is harmonious relations of complementing and promoting each other between faith and reason, religion and science.

From the epistemological point of view, first of all, the full meaning of faith is not just unreason. It inherently includes the necessary quality of scientific cognition. The faith not only embodies the worship and awe of the sacred objects in the cognitive process of subject, but also shows the initiative and strong spiritual power when the subject recognizes the object, because the cognition risen to the level of faith itself is a very solemn and serious activity, not only asks the subject to have the necessary enthusiasm, passion, determination and reason of cognitive activities, even the necessary dedication sometimes. Einstein was of the view that science and religion can not be discriminated in the extreme, both are the solemn and lofty incredible order showed in exploring the nature and the thinking world. Einstein had classified religion into three categories, in which the universe religion can be seen as a high combination of science and religion, because “the emotion of universe religion is the most powerful and noble motive of scientific research. Only those who have made great efforts, particularly those who have shown the dedication enthusiasm, can understand the force of such an emotion. If no such enthusiasm, we can not achieve success in the ground-breaking work of pure science.” “If we do not believe that the structure of theory can master the existence, if we do not believe the internal harmony of the world, there can be no science. This belief is and will always be the fundamental motivation of all scientific creation” (Einstein, 1976b, p. 282).

Second, scientific cognition itself contains unreason. This is not only because science ever was a maid of theology, and there is unreason in the very beginning and very end of its cognition, but also because the developing of scientific cognition and gaining of scientific achievements have never been out of the helps of unreason. The objectivity of scientific cognition shows that science can only understand the established world, but what the situation of the established world’s very beginning was, and what the very end will be, in terms of science, is an unknown and irrational problem. Professor Alexander said: “When the science involved in the wider world, it will need the help of God” (Russell, 1982, p. 112). In other words, the source and the ultimate of
scientific reason can be built on the basis of unreason such as some talented guess, inspirational presupposition and even divinely revealed and so on. Kepler was able to achieve such a brilliant scientific achievement on the planetary laws of motion, mainly because “he was convinced that the sun was an object with the Holy Spirit more or less” (Russell, 1982, p. 13). Russell had ever lamented: “This is an extreme case often appeared in the history of science, that is, some theories which are ultimately proved to be correct and important originally due to a number of totally unrealistic, absurd thinking of their discoverers” (Russell, 1982, p. 12). Even in the process of scientific knowledge, lots of scientific knowledge and discoveries also turned to the irrational imagination, speculation and assumptions. Albert Einstein once pointed out: “I believe intuition and inspiration.” “Imagination is more important than knowledge, because knowledge is limited, while imagination sums up the world’s all to promote the progress, also it is a source of knowledge. Strictly speaking, imagination is an actual factor of scientific research” (Einstein, 1976a, p. 284). In the process of exploring the basic laws of physics, “no logical access, we can get those laws only through the intuition based on the understanding which resonates with experience. It is precisely because scientific research can not be separated from the irrational, so “it is difficult to find one who does not have his own religious emotion in the versed scientists” (Einstein, 1976a, pp. 102, 283). “All the people who have great creation in science have been imbued with the true religious faith” (Einstein, 1979, p. 256).

Finally, rational knowledge and irrational knowledge are not completely opposite. Rational and irrational are all relative to the cognitive ability of human. With the improvement of the level of human cognition and practical ability, many of the irrational problems become more rational gradually. So, rational and irrational have always been relative concepts. Science and religion are both rational and irrational. On the major terms, religion achieves its ultimate goal in the process of constantly beyond the rational, while science grasps the rational in the process of constantly beyond the irrational. In addition, rational knowledge and irrational knowledge are not completely separated from and opposite to each other, but there is the dialectical and unified relationship of interpenetration and mutual-transformation. On scientific cognition, it is intertwined with rational and irrational factors in its very beginning, very end and the whole cognitive process. No doubt scientific cognition is a kind of rational construction, and its basic model has already been doped irrational and subjective presupposition. Although the practical process of scientific cognition pays much attention to objective reason, the selection and interpretation of data is inevitably infiltrated by the subjective will of the subject. Although the result of scientific cognition is objective, it is presupposed by the subject at the beginning of the subjective cognition. Furthermore, blindly trusting science without criticism easily leads to the irrational result of science superstition.

It can be seen that religion and science are recognition and fulfillment on the solemn order of the universe, and consciously abide by the “communication rules” in the field of cognition. Faith and reason are not the essential distinction between religion and science. Religion contains reason, and science also contains belief. Irrational factors run through the whole process of scientific cognition, and sometimes play an unexpected role in promoting scientific cognition. Rational and irrational confrontation is not clear-cut, but there is some kind of dialectical and unified relationship. The ultimate of faith leads to the rational, and the faith is the product of the contradiction between the finity of reason and the freedom of thinking, a hybrid of the strange combination of rational and irrational, is also the ironclad proof of accordance between religion and science in cognition mechanism.
Conclusion

In the initial period of human history, religion and science had been in a state of One for a long time, and the primitive witchcraft was the historical witness of the symbiosis between the two. Throughout the ancient society, religion and science always showed a situation of companions, for example, ancient astronomy in the west was closely related to Christianity, and ancient Chinese chemistry was inseparable from Daoism. Only since the 16th century, with the development of the Renaissance and the Enlightenment, science has gradually developed on the path of independent, and has increasingly been on the rise. At the same time, religion is relatively weak and constantly criticized. The opposition between religion and science has become a hot topic.

However, through the superficial differences and conflicts between the two, we find that religion and science follow the almost consistent basic principles in the cognitive mechanisms, that is, they are based on the reality of objective existence, follow the general law of cognition, and the cognitive process is both rational and irrational. Therefore, it can be seen that there is always a benign interaction between the two in essence.

Religion and science have always been the two basic forces that affect human beings. Religion is the main spiritual force for the survival and development of mankind, while science is an important material force for human understanding and transformation of the world. For human society, the two are just like two wheels of a car and two wings of a bird, either of which can not be neglected.

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