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Two Olive Branches: Science and Religion

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1. Introduction

“In Dialogue with Nature” provides us with insights into what science is along its history of development. Pre-existing as Natural Philosophy, it could be divided into two eras, of which “modern science” is hereby discussed. Modern science is “the pursuit and application of the knowledge of the natural and social world following a systemic methodology based on evidence” (Science Council). Methodology includes experiment, induction, repetition, critical analysis and verification, which are all basis for an evident conclusion.

While the course does not emphasise much religion, it appeals to the general understanding that religion is “the belief in and worship of a god or gods, or any such system of belief and worship” (“Religion”). Most, if not all, religions have three central properties: they are social systems, involve population mobilisation in carrying out routine-based activities, and endorse the supernatural and designate it as holy or sacred (Dietrich).

The perk of modern science is attained by the publication of *Principia* by Newton regarding revolutionary physics discoveries at the time (Cohen 53). Since then, more and more people side with science.

A sense of antagonism gradually divides the two areas: juxtaposing scientific investigations as truth and religious rituals as superstitions. While it remains as a timeless debate on what is truth, I believe that science is not a new religion of the 20th century, and it never will be due to the fundamental differences between their meanings to humanity and formats of pursuit. Nevertheless, science and religion are a lot less contradictory than one might perceive. They both offer individuals a way to understand the world and the motivation to enquire deeper. It is a matter of how we would like to be related to the nature—more of a specimen-investigator relationship or a spiritual sympathy, or even, a mix of both.

2. Differences between Science and Religion

2.1 Values to Humanity

One layer of the meaning of science to mankind is to bring conveniences to our daily lives, as in the application value of science. This value is amplified should the scientific principles behind be not limited to a particular or immediate application, but could re-appear in another production or back up the construction of another innovation (Poincaré 160). The universality of scientific application could be easily proved by extensive presence of electronic appliances. Once artificial intelligence is invented, scientists together with businessmen have been relentlessly creating new products that become Siri and robots today. In this highly commercialised world, the degree of practicality is even deemed as the sole value.

Nevertheless, science started off as an intellectual pursuit in the time of Aristotle. This intellectual value is fused by humans' inherent inquisitiveness. Historical figures strived to come up with logical deductions

about the whys of the whats, as ancient as how Aristotle tried to simplify the eternal universe by dividing it into five elements (Lindberg 25). Till now, many scientists are still endeavouring in the ever-going discoveries of nature, satisfied with the pleasure derived from every piece of new knowledge (Poincaré 163). Science exists beyond as merely a value, but also an intellectual beauty. Science is a tool for understanding Cosmos, the Earth and people.

While religion does not give rise to everyday physical components nor concrete explanations to every phenomenon, its value lies with appreciating the beauty of the world and savouring our surroundings, instead of getting to the root of why it exists this way. Although a theory of origin may be provided in a religion, it acts as shaping the almightiness of the supernatural power, thus placing the power as the core of belief and fundamentals of the religious messages.

The quotes by the Almighty deliver reassurance and even catharsis to the followers. One predominant characteristic is the call for valuing immaterial mind and devaluing earthly possessions. For instance, *Bible* wrote, “[y]our beauty should not come from outward adornment . . . , it should be that of your inner self, the unfading beauty of a gentle and quiet spirit, which is of great worth in God’s sight.” (*Bible*, 1 Pet. 3:3–4) The value of religion is about the spirituality that leads to purposeful lives. It gives followers a set of prototypes about the attitudes, mentalities and way of living. Unlike science which takes advantage of the curiosity of mind for discoveries, religion aims to express and strengthen the goodwill of mind for better deeds. In other words, science is more result-oriented, whereas religion outweighs the processes leading to each and every good striving.

2.2 Formats for Pursuit

Pursuing science and immersing in religion are two entirely different mechanisms. Modern sciences are always based on evidences, so the methodology inevitably involves a lot of experimentations or calculations. Meanwhile, people do not stand religion because of concrete proof, but faith and somehow their superegos.

Aristotle, the pioneer in Western science, developed an outline for the steps in investigation. Experiments were not included in the proposed inductive form as he disapproved of the confinement of a simulated setting (Lindberg 21). Putting the necessity of repeated experiments in modern sciences aside, the outline laid out a foundation for the format of pursuit and has been abided till now. The pathway, which starts at observation and succeeds with logical deduction, may be branched and directed back to the starting point once the trials fail to prove the hypothesis. This is what science is about: out of the vastness of possibilities, there is only one answer. The answer ought to be a “deductive demonstration” to be acknowledged, meaning that all conclusions should be valid if the premises are true (21). Therefore, mathematics and statistics are so important in conveying the accuracy of the law and to allow its application in literally all scenarios. They provide uniformity to the “correctness” of the premises, thus ensuring the legitimacy of the outcome deductively.

One factor leading to a wide variety of religions is the lack of agreeable evidence to prove the validity of their core. The godless Buddhism advocates impermanence; Hinduism worships multiple gods, and biblical illustrations appear in three monotheistic religions (Laderman). The triggering of faith is unique for each follower, be it family background, regional culture or merely a sudden enlightenment. The complexity behind devoting to

a religion could be experienced with the simultaneous involvement with Freud's psychic theory. Superego is expressed in the believers who truly want spiritual cleansing, as they believe they could be better off than the present or feel obliged to commit religiously to erase all sins and selfishness. The fear for death and afterlife relating to id and identification of the religion as personal trait is a manifestation of ego (Kandel 179). It is a practical reason to grow a faith for the comfort at heart.

Consolidation of the faith of followers and construction of a religious community require routine-based actions. Catholicism and Christianity have praying and Sunday masses; Buddhism has meditation and mantra-chanting, just to list a few. Psychologically speaking, chanting or any form of repetition induces a sense of belonging and reassurance. The purpose of the rituals is to first develop a habit in and a comfort zone among individuals, then to internalise in them the meanings behind these activities. When the rituals become a form of worshipping, carrying out the physicality would enrich the mental aspect as well a sense of sacredness. This appeals to the emotions rather than the logics.

2.3 Are They Both Beliefs?—Falsifiability

Belief is considering something true even though we could not provide 100% accurate proof (*Religion and Belief*). Based on the nature of science about knowledge being tentative and subject to change, some argue that the testability of science makes it no different than a faith. Darwin wrongly proposed “pangenesis” in relation with his renowned theory of evolution, coinciding with inheritance of acquired characteristics (Watson 100). A lack of intactness is inevitable, and one can yet know the full picture of the scientific mechanism of the world. People advocate modern science not

based on absolute grounds of proving, just like religious believers. Thus, the two disciplines are intrinsically in the same catalogue—they are both beliefs.

Testability of modern science allows the input of mathematics to refine or re-establish the formerly faulted principles, which is deemed as the beauty of science. Nonetheless, having falsifiability as the precursor for possible testability distinguishes it from religion, which is unfalsifiable in the first place. For science, people could always assume it is false and hence, test all over again. For religion, one doubt exists and the core shatters.

Ironically, being used to back up science, falsifiability suggests that no theories are completely true, but can be accepted as truth upon evident support (Shuttleworth and Wilson). Speaking of Charles Darwin, at least his problematic theory could be overthrown by the experiment of tail-cut mice and contribution could be commemorated thanks to advancements in genetics, the sorting of fossil records and analysis of homologous structures. The origin of all species might indeed be a common ancestor (Darwin 88).

Scientists are not omniscient enough to solve all puzzles about the world we live in, but there are always new disprovable hypotheses that may or may not fill up the imaginative gap. For religion, the imaginative space is fully occupied with a static set of rules and ideologies. They are unfalsifiable. People follow with minimal scepticism; some may elaborate further on the given knowledge. Religious knowledge is more certain, and perhaps truer, in a sense that it is unbreakable, while scientists are encouraged to doubt the scientific truth, the truth that is more down-to-earth with reality. At this moment, people may deem a principle as the only true cause. As legit champion of science, however, there is always room for uncertainties and overthinking, even for the most well-established theories. This is one big difference splitting science from belief.

3. Conclusion: Science, Religion and the World

“All religions, arts and sciences are branches of the same tree,” Einstein once said. Despite the very different values offered to humans and the methods utilised in religion and science, they tell us something about the world, each from the end of a delicately refined angle of microscope. Focusing on the same tree, science tells us the invisible process of photosynthesis, whereas religion refers to it as the gift of God. There are no right or wrong thoughts, just ideas from specific mindsets about individuals’ relationship to the trunk, to nature.

“All these aspirations are directed towards ennobling man’s life, lifting it from the sphere of mere physical existence and leading the individual towards freedom.” He continued. Freedom is the liberation of souls from physicality, achieved through pure science or sheer religion or many other endless possibilities. A science teacher that teaches evolution could bear a religious belief. He/she could appreciate the falsifiable nature of science and find spiritual comfort through the definiteness in faith. After all, they are equal products of the mankind’s urge to understand our habitat and the vast universe, the unknowns. The diverged aspects do not necessarily make them dichotomies. Mutually exclusiveness may just be an absolute concept in probability, waiting to be challenged or perfected. Who knows?

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Teacher’s comment:

In this article, Wing Yan had carried out a well-balanced analysis on the differences between science and religion. She was able to pin down some essential characteristics of both and guided us through the comparison smoothly and enjoyably. While some may equate science with a new religion and some others may put the two in an opposition, through her arguments, Wing Yan put forward a balanced yet convincing response: “it is a matter of how we would like to be related to the nature—more of

a specimen-investigator relationship or a spiritual sympathy, or even, a mix of both.”(WU Jun Vivian)