CHRISTIAN FAITH AND SCIENCE CAN SCIENCE ENHANCE THEOLOGY?

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Abstract

Faith and Science are often seen as incompatible terms. Some perceive that Science and Christianity are locked in an eternal struggle. Today, however, scientists and theologians all over the world have been engaged in productive dialogues about faith and Science. Some may ask, is such a dialogue possible? From a Christian perspective, the question may also be asked: Is there an authentic science that an authentic Biblical theology could and should be in dialogue with? Can Science, in any way, enhance Christian theology? Can Christian theology in any way enhance Science? This essay looks at answers to these questions.

Keywords: science, faith, theology, Christianity, dialogue

1. The necessity of the questions

Those, who grew up in an atheistic-Marxist society and came to the Christian faith after 1989, have been taught by scientific atheism that there is an unbridgeable gap between faith and Science. In the West, the theory of an eternal conflict between Science and religion held prominence for a significant part of the twentieth century. Though the perception of an unending conflict between Science and religion is prominent, it is an inaccurate picture of the relationship of Science and religion throughout history. Historically the relationship has had least four identifiable perspectives: 1) the theory of irreconcilable conflict, 2) independence, 3) integration and 4) respectful dialogue. Irreconcilable conflict is promoted in books written by 19th century writers such as J.W. Draper and A.D. White, Soviet scientific atheism, and the so-called 'New Atheist' movement (among others: Richard Dawkins, Christopher Hitchens, Sam Harris, and Daniel Dennett). Independence views Science and religion as strangers operating in separate spheres and keeping a safe distance from one another. Integration involves religionists' attempts to accommodate Science, the Big Bang, and evolution into their theology. Respectful dialogue involves theologians and scientists viewing one another as

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partners in reflecting on and comparing methods of study about conceptual models, the orderliness of the Universe, and non-repeatable events which can be seen as the communication of information from God [1].

Modern scientific historians have come to dismiss irreconcilable conflict as intellectually inadequate, "historically bankrupt", and a "deception" [2]. Recent scholarship among scientific historians has concluded that the historic relationship of Science and religion has been "much more positive than is sometimes thought". At times Christianity "nurtured and encouraged scientific endeavor", and often they "co-existed without either tension or attempts at harmonization" [3].

There are historical examples of conflict on both sides – the Galileo incident or the teaching of 'social Darwinism' at the beginning of the twentieth century. In times past this conflict was rarer but has grown in the twentieth century. Until scientists and theologians deal with the prejudices which have been inherited from this perceived history of conflict, dialogue will be difficult if not impossible. Scientists as well as theologians need to get rid of prejudicial views, focus attention on a more accurate view of the historic relationship between Science and religion, the possibility of cooperation, and of the positive influence between scientists and theologians.

Christian theologians must take into account what is going on in the world. They need to understand and relate to important new scientific discoveries. They must not ignore the questions people are asking, nor can they ignore new scientific discoveries. To do so would alienate them and the Church from the wider world and their faith communities. Believers are not Gnostics who ignore the physical world. (One of the most prominent early church apologists who took on the heresy of Gnosticism was Irenaeus of Lyon (AD 130-202). He defends the value of this physical world including the human bodily existence [4].) Before starting a dialogue and thinking about what science and religion have to offer one another, however, the partners need to be identified to prevent misconceptions [P.R. Hinlicky, *Problematika súčasného dialógu kresťanskej viery v Stvoriteľa s prírodnou vedou*, Templeton Award-Winning Course taught at the Theological Seminary in Bratislava, 1997]. What is authentic contemporary Natural science and, likewise, an authentic Theology of the classical Christian faith in the Creator? [5]

2. Post-Cartesian science

Contemporary Science has moved past the dualistic and mechanistic worldview it came to hold after the Reformation and especially during the Enlightenment, which was first articulated philosophically by Rene Descartes. This worldview tried to separate the physical and spiritual worlds into two different ontological spheres. The physical world of bodies was supposed to be governed strictly by natural laws and the spiritual world of minds by the divine will and values. The traditional doctrine of creation, which teaches the continual, active, personal engagement of the transcendent Creator in His creation, became unnecessary in this scheme and was thus rejected. Any act of God the Creator could only be understood as an intervention and disruption of autonomous natural process – natural laws. The central Christian doctrine of the redemption of the creation in Christ was limited to the sphere of personal piety. This worldview became quite popular because it allowed for a compromise between the supposedly conflicting claims of faith and Science.

Modern science, however, has rejected this Cartesian way of thinking with its mechanistic dualism. Physics has shown that matter itself is a form of energy $(e = mc^2)$ that exists and constantly changes in a one-way historical process [6] – according to the principle of entropy. This has a great impact on our whole understanding of the Universe. The world is not an eternally existing system of physical things, but rather it is both physical and spiritual and both are intertwined. The world has a beginning and an end. In addition, our observation of chaos in systems that can otherwise be described by "deterministic equations", lends credibility to the notion of a measure of freedom of events (processes) within our contingent Universe [7]. (Ambrozy rightly points out that "theology assumed that disorder and chaos itself are actually connected with evil and the personification of evil - Satan" [7].) This understanding of the contingency of the universe leads inevitably to the metaphysical question about God the Creator which Science is unable to answer. Metaphysics and spirituality are not the realms of Science. True science is not scientism which "assumes that only science can describe and understand the world, and that only the material or natural world is real" [8, 9].

3. The Creator who creates 'from nothing'

The Scottish theologian Thomas Torrance characterizes an authentic Christian faith as a Trinitarian faith that correlates with the belief in *creatio ex nihilo*'- creation out of nothing. God the transcendent Creator of the Universe is revealed by the Spirit as the Father of Jesus Christ, His beloved Son, by whom everything was created [10]. This Trinitarian understanding impacts the theological concept of creation and redemption for it means that this world does not necessarily have to exist. It is contingent. God did not need it because He was bored. The world is not needed for God to have something to love, because God is a life of eternal love in Himself, as Father, Son and Holy Spirit. Rather the world exists because of the fullness of love within the triune God, who freely chose to create a world and creatures other than Himself, and value them for their own sake.

God created everything out of nothing (cf. Genesis 1.1). That means that in comparison with the Being of the one true God, everything else that was created is contingent. Everything depends for its existence on God. This is the ontological line that must be drawn – not between mind and matter, or visible and invisible, but between Creator and creation. The doctrines of the Trinity and of creation out of nothing help in understanding the continuity of creation and its redemption by the death and resurrection of Christ and the eschatological coming of God's kingdom. Martin Luther's emphasis that creation is in a process which does not end until the coming new creation should be followed [11].

At the same time an authentic Christian faith teaches that the Christocentricity of creation means that Jesus Christ is the centre of the history of salvation (cf. 1Thessalonicians 1.19-20), just as He is the One who with the Father and the Spirit created all, and the One for whom all things exist (cf. 1Thessalonicians 1.16-17). While Christ is the central point of the saving work of the Triune God, a false concept of Christocentricity is created by ignoring the Father and the Spirit, which overlooks the triune God's involvement with the whole of creation.

The above exposition shows how the dialogue partners should be viewed to deal with the question as to whether Science and Christian theology can enhance one another. Ever since the fall into sin there has been tension between the knowledge of God and the knowledge of the world. This tension should lead to humility and mutual respect, recognizing the limits of human reason for "now we see through the glass darkly" (I Corinthians 13.12). Talk about the true Creator God of revelation and faith should be connected with knowledge about His empirical creation which Science studies. This involves the interaction of science and religion and the correlation between the knowledge of God and the knowledge of the world.

In this interaction, Christians need to retain the Trinitarian understanding of God, that means, Jesus, His Father, and their Spirit are - and will prove to be for all - the One and only Creator God. Christians know this Creator God from His revelation in Scripture (cf. Genesis 1.1, Hebrews 1.3). This raises the question as to which authority should guide - God's Word in Scripture or human wisdom clouded by the brokenness of sin? From the natural sciences knowledge is gained about creation's laws, how God's creation is ordered, and theories about how the world came about. This is the meeting point in the dialogue. It is also the reason why this dialogue needs to take place. The factual scientific understanding of the creation in which humans live can immensely enrich the Christian understanding of the work of the Creator, which in turn becomes more accessible and comprehensible to modern people. Hence the necessity of dialogue between Christianity and Science.

Modern science has blessed the world with advances in health care, the discovery of medicines, and products which have improved the quality of life like vacuum cleaners, computers, and indoor plumbing. Modern Physics keeps revealing how intricately designed God's creation really is. One can agree with Pannenberg that Christians must not invent their own science that would suit them better. Nor can they invent a new Christianity. (Pannenberg argues that "If the God of the Bible is the creator of the Universe, then it is not possible to understand fully or even appropriately the processes of nature without any reference to that God. If, on the contrary, nature can be appropriately understood without reference to the God of the Bible, then that God cannot be the creator of the universe, and consequently he cannot be truly God and be trusted as a source

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of moral teaching either." [12]) Nor should Science become scientism which dismisses out of hand the existence of God, nor should it operate in the metaphysical realm. If scientists begin to speculate metaphysically, and go beyond their fields of scientific competence, Christian theologians should be ready to communicate to them their understanding of God's eschatological plan, His purpose for creation, and the place human beings have in it.

4. Moving forward

Since the conflict theory is still a common perception of the relationship of Science and religion, how should respectful dialogue move forward?

First, faith must not be seen as a primitive form of Science. Science should not be viewed as an alternative worldview which replaces God with human reason, or which takes God's place as a standard and norm over all things. Believers should see that modern science is generally enabling a more accurate view of God's creation. For example, Science has revealed a good estimate about the extent of the Universe. This new knowledge can negatively impact an anthropocentric faith or it can enlarge the horizon of faith and elevate one's understanding of how great, mighty, and inconceivable God the Creator is. God the Creator, the Father of Jesus Christ, does not need a gap to hide in [13]. He does not need scientific benevolence. Rather, theologians need to be certain about who God the Creator is and what the relationship is between God and His creation.

Second, scientists need to understand that Natural science leads to metaphysical questions that are beyond the scope of Science [14]. The main question for Christians is not how the world came into existence but what is the true relationship between the world and God the Creator. When these basic things are clear, Christians are better able to put the knowledge of God and the knowledge of the world into a learned mutual relationship. These things help one avoid a faulty rejection of all science, aggressive secularism, scientism, as well as a faulty view of the conflict between Science and religion.

Third, Christians should grow in their understanding of '*creatio ex nihilo*' and '*creatio continua*'; the Christocentricity of the creation; the ontological division between the Creator and the creation, all of which point to the concept of God's creating the world out of His abundant, free love. But above all, Christians need to focus on the Biblical concept of reality as a unique history of salvation with an eschatological future (cf. Revelation 1.8) until the triune God brings this world to an end, in accordance with His divine purpose and love (cf. Revelation 21.1-4). This is the message Christians should constantly communicate to the world, to scientists, and lay people.

Fourth, Christians must not ignore the input of science but should learn more about God's beautiful magnificent creation of which they are a part. And because Christians have the God-given calling and vocation to be stewards of creation, they need to understand that caring for it is one way of thanking God for it (Genesis 1.28). Fifth, it is not the Christian's task to prove God as Creator on the basis of Natural science. Nature itself is a good teacher about the mystery of God's eternal power (cf. Romans 1.20) even though one's vision of creation is warped by sin. People who are estranged from God by sin (cf. Isaiah 59.2) can only recognize the true Creator God on the basis of His loving self-giving in His Son, Jesus Christ, in whom sinners are made new creatures (cf. 2 Corinthians 5.17). Because of sinful egocentricity, human reason by itself, even with the help of nature or Natural science, can never reach true knowledge about God's creation or about the Creator who creates out of nothing. God's two books (nature and Scripture) need to be studied diligently by all of God's creatures. And the symbiotic relationship between Science and religion reminds both groups that there are limits to what can be known.

Sixth, the dialogue between religion and Science is necessary to gain a better understanding of the real world human beings inhabit. How are Christians to deal with scientific theories like evolution, the Big Bang, the anthropic principle in physics, and other discoveries? Science itself is wrestling with these questions. Scientists are even questioning Darwinian evolution [15]. The relegation of Pluto to something other than a planet [16, 17] reminds one that Science at times supplies the world with answers that are tentative rather than absolute. The intricate orderliness of the created world which modern Physics is revealing has implications for the prevailing scientific view that things evolved in a chaotic and random way [18]. Numerous organizations today are studying the relationship of Science and religion. They range from creationist organizations to organizations that incorporate an integrationist view of Science and religion (The Institute for Creation Research, The International Society for Science & Religion). There are journals (Zygon, Theology and Science, European Journal of Science and Theology, etc.) dedicated to setting forth a view of the relationship of Science and religion.

Seventh, Christianity should be seen as philosophically friendly to Science because it provides principles that lend support to the scientific enterprise – teaching that there is a natural order to be discovered. Humans have a rationality that enables them to discover truths about the creation. Further, on the basis of faith Christians are permitted even required to be engaged in the scientific enterprise as part of their Christian vocation [9, p. 94-97]. Early Christian pioneers of Science were driven by the desire to learn more about God's creation. There is need for a deep interdisciplinary dialogue between religion and Science. Open and honest communication is key, not only for a better mutual understanding of opposing parties but also for promoting peace and cohesiveness of human societies. As Pal'a rightly points out, "the level of communication determines relationships in society" [19, 20].

5. Conclusions

The question 'Can Science enhance Theology?' has the propensity to stay relevant and acute for us and for generations to come. The answer seems

obvious: 'Yes!' However, for this to be true, certain conditions must be met. The legitimate dialogue partners will avoid the pitfalls of scientism as well as blind and irrational fundamentalism (both, religious and secular-ideological). Authentic scientific research contributes to a better understanding and appreciation of the Creator's immeasurable wisdom and power in His works of creation. It can help in understanding how God's creation works and is ordered. and how Christians can live in their calling as caretakers of the Earth so that God's will is done, on Earth, as in Heaven! Christian theology can enhance Science by providing the metaphysical answers Science is unable to provide and in assisting with moral questions that arise. An important principle here is that all theology is to be done for the edification of humans, as S. Kierkegaard, the famous Danish existentialist, reminds us: "From the Christian point of view, everything, indeed everything, ought to serve for upbuilding. The kind of scholarliness and scienticity that ultimately does not build up is precisely thereby unchristian' – thus, according to Kierkegaard, one should rather 'venture wholly to become oneself, an individual human being, this specific individual human being, alone before God, alone in this prodigious strenuousness and this prodigious responsibility'." [21] (For recent analyses and interpretations of the legacy of Kierkegaard's existentialism for contemporary Christian reflection, see [22-27]) Hence, the contemporary Christian churches must continue to struggle in their effort "to leave formalism that is connected to the state church, but also in the movement of new evangelization and re-evangelization" [28].

Finally, an ethical note: human beings were created in the image of God. Though they share the same biological substance (e.g. a DNA-based constitution) with other living things, their destiny overlaps into transcendence. "Animality places man as a living organism and being with senses into the physical world. The other pole of being is transcendentality which lies in the spirituality of a human being." [29] Being created in the image of God means, among other things, that they are caretakers of God's creation, not its despotic rulers (cf. Genesis 1.28). They are God's partners, not because they are so good, or closer to God ontologically, but because God calls them by His Word and invites them to be His partners. The stewardship of this Earth is a Christian responsibility. Because sin has corrupted human nature, humans have turned away from their Creator to themselves. They want to be their own gods. Thus they don't understand God, His creation, or even themselves. In Christ the image of God is restored, and in Him believers are empowered to be 'servant lords' of the earth to the glory of God the Almighty, Creator of all. In order to arrive at such a (desirable) conclusion, however, one must embrace an authentic, canonical hermeneutics of the Bible. Such hermeneutics is not only "the tool by whose help the early communities of believers endured", but which lays foundations for the current development of human communities as well, "perceiving and embracing the integrity of ontology and ethics as they were captivated by the Gospel narrative" [30]. Authentic religious thinking thus should not be limited to "a system of Theology; it should be understood instead as the most authentic manifestation of the fundamental situation of human beings, who ty to find truth about themselves, while striving for salvation" [31], as Dancak correctly observes. Based on the Gospel narrative, "Christian theological anthropology understands the human being as a personal, holistic unity of the above mentioned aspects, integrating them with transcendent, spiritual realities. These provide an invaluable life orientation, inner motivational force, along with a structure of meaning and purpose. While the spiritual aspect of human existential experience can be expressed through biopsychosocial media, it should be distinguished as a unique, separate anthropological entity that overlaps into transcendent reality. Spiritual etiology, among other things, adds valuable insight into the multifaceted socio-ethical discourse in the contemporary debate between the secularists and those who point out a world-wide resurgence of religious traditions and new forms of spirituality." [32] Science and Theology dialogue thus arguably carries a strong potential for contemporary ethical discourse with clear implications for our multicultural societies [33].

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