

## Editorials

# The harmonious relationship between faith and science from the perspective of some great saints: A brief comment

MANUEL E. CORTÉS<sup>1,2</sup>, JUAN PABLO DEL RÍO<sup>2,3</sup> AND PILAR VIGIL<sup>2,4</sup>

<sup>1</sup>*Departamento de Ciencias Químicas y Biológicas, Universidad Bernardo O'Higgins, Santiago, Chile*

<sup>2</sup>*Reproductive Health Research Institute, Santiago, Chile*

<sup>3</sup>*Escuela de Medicina, Facultad de Medicina, Universidad de Los Andes, Santiago, Chile*

<sup>4</sup>*Pontificia Universidad Católica de Chile, Santiago, Chile*

*The objective of this editorial is to show that a harmonious relationship between science and faith is possible, as exemplified by great saints of the Catholic Church. It begins with the definitions of science and faith, followed by an explanation of the apparent conflict between them. A few saints that constitute an example that a fruitful relationship between these two seemingly opposed realities has been possible are Saint Albert the Great, Saint John of the Cross, Saint Giuseppe Moscati, and Saint Edith Stein, among others, and this editorial highlights their deep contributions to the dialogue between faith and reason. This editorial ends with a brief discussion on whether it is possible to be both a scientist and a man of faith.*

*Keywords:* Catholic saints, Dialogue, Faith, Reason, Science

### INTRODUCTION

In the current academic scene, it is quite common to hear of the alleged conflict and incompatibility between science and faith, between being a scientist and being a believer. Any scientist interested in establishing a dialogue with the world of faith would probably be frowned upon. The present editorial aims at showing that a harmonious, complementary, and productive coexistence between faith and true science (the one guided by reason) has indeed been possible—and is still possible

in the present day. Such fruitful coexistence is exemplified by the remarkable work of some important saints and intellectuals of the Catholic Church who have made significant contributions to theology, philosophy, natural science, medicine, and bioethics.

### A Definition of Science

Let us begin by establishing what is meant by the term “science.” Science<sup>1</sup> is a human

activity aimed at acquiring a reliable knowledge of the causes and principles of things (Cortés and Alfaro 2013). Science results from man's attempt to understand the natural world, comprehend the universe to which he belongs, and thus explain to himself his longing for transcendence. Hence, man seeks to satisfy his need to immerse himself in the world, reveal the unknown, and conquer it (Cortés and Alfaro 2013). From this perspective, science and faith share the same fundamental concerns: the intimate wish to comprehend the infinite, be part of it, and decipher the role man plays in it. According to Aristotle, man's admiration for all that surrounds us would account for the search for knowledge; in this wider sense, science should be understood as natural philosophy.

### A Definition of Faith

In line with our approach, we must now define "faith"<sup>2</sup>; before doing so, one has to first accept an anthropology that acknowledges the presence of levels in man beyond the purely material levels. That is, it is necessary to assert the spiritual and transcendent dimension of man. This dimension connaturally implies a deep yearning for eternity, embodied in the search for Truth through the intellectual powers of man: memory, understanding, and will (cf. Aquinas 1947). We are especially concerned here with the power of understanding, where new life is given to intellectual pursuit, the one science is concerned with.

Saint John of the Cross (1542–1591), *Doctor Mysticus*, defines faith from an ontological and dynamic perspective as the supernatural means to achieve union of the understanding with God, enabling this power to participate in Divinity (John of the Cross 2009; Wojtyła 1979). This

means that through the free action of faith it is possible to walk toward a truth that transcends ourselves; faith itself, through the discovery of and participation in creation, leads us to this truth. According to Saint John of the Cross, faith does not deny the power of understanding, but rather, it raises it to its full potential so it can contemplate the mystery of the created (John of the Cross 2009).

### THE ALLEGED CONFLICT BETWEEN SCIENCE AND FAITH

In Carroll's (2003) words, science and faith in relation to one another should have been twin pillars of civilization. However, such a relationship is not as evident for the current scientific community. The reason for this would be that Descartes's statement "I think, therefore I am" (*Je pense, donc je suis*, Descartes 1637), which constitutes a fundamental element to Western rationalism, has been misinterpreted by many scientists from the Enlightenment to our times, reducing human nature to mere intelligence, and thus, reducing him to an object. In fact, Saint John Paul II made extensive reference to the tragic division between faith and reason which originated with the emergence of modern science and lasts to the present day:

Particularly, beginning in the Enlightenment period, an extreme and one-sided rationalism led to the radicalization of positions in the realm of the natural sciences and in that of philosophy. The resulting split between faith and reason caused irreparable damage not only to religion but also to culture. (John Paul II 1999)

Hence, the apparent conflict and incompatibility between science and faith came to serve as a basis for two broadly

antagonistic positions: on the one hand, a strict rationalism, reductionist to the point of not acknowledging the spiritual nature of the human being, thus denying its sense of transcendence. This can be exemplified in the opinion of Nobel laureate Francis C. Crick, one of the discoverers of DNA structure in 1953, who stated:

You, your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules. (Crick 1994)

And, on the other hand, we have creationism, a set of beliefs based on which the Earth and every current living being originated in an action of creation performed by one or more divine entities according to a divine intention (Hayward 1998). Thus, most pseudoscientific and religious movements subscribing to creationism go against the theory (or theories) of evolution (Ayala 2007). Hence, fundamentalists and creationists (not identical) have proposed that creationism be taught in school science class as a valid alternative to evolution (Yahr 2008). This stream of thought denies part of the physical reality of creation. In view of the above, it is necessary to bear in mind Saint John Paul II's clear reference to this dichotomy in his Encyclical Letter *Fides et ratio*:

I make this strong and insistent appeal that faith and philosophy recover the profound unity which allows them to stand in harmony with their nature without compromising their mutual autonomy. (John Paul II 1998)

Hence, the apparent contradiction between pure materialism and creationism is a dissociation of faith and reason taken to the extreme. In contrast, a productive and enlightening relationship between

faith and reason has constituted a striking feature of some remarkable Christian thinkers, as is briefly commented below.

#### SOME GREAT SAINTS AS EXAMPLES OF FRUITFUL COEXISTENCE BETWEEN FAITH AND REASON

First, we will refer to Saint Albert the Great (1206–1280), *Doctor Universalis* and “patron saint of natural scientists” (Ortega 2010), whose humility and selfless intellectual endeavors served as an inspiration for a number of disciples, among them Saint Thomas Aquinas. His many contributions include his proposal that the Earth was round, a detailed description of plant morphology and, in the field of chemistry, the discovery of the element arsenic (cf. Ortega 2010; Reed 1980; Valderas 1987). Another intellectual possessing deep spirituality was the Italian physician Saint Giuseppe Moscati (1880–1927), a prominent figure both for his pioneer work in physiological biochemistry (particularly the study of reactions involved in glycogen transformation) (Moscati 1906 1907), and for his integration of faith and reason, as particularly expressed through his disinterested work with the poor and incurably ill patients. He personally looked over the “incurabili” (incurable) patients in the hospital, where he remained stationed for several years. While taking care of the ill, Moscati never stopped doing research, balancing science, and faith. Edith Stein (1891–1942), also known as Saint Teresa Benedicta of the Cross, co-patroness of Europe, was a German Carmelite who participated prominently in the dialogue between science and faith. Initially an atheist philosopher ascribing to phenomenology, following a long discernment period she entered religious life and devoted herself to deeply spiritual and philosophical writings, among them

*The Structure of the Human Person* (Stein 2003). Stein reaches the conclusion that “he who seeks the truth, whether aware of it or not, seeks God”; according to Stein, for philosophy, the meaning of faith is twofold:

if through faith a truth is reached that cannot be accessed by any other means, philosophy cannot deny such facts of faith without relinquishing its claim as universal truth, and moreover, without risking its inherent knowledge being tainted by error; due to the organic interdependence of truth, if separated from the core, any partial aspect of it will be poorly illuminated. Hence the material dependence of philosophy on faith. Therefore, if man’s highest certainty is inherent to faith, and if philosophy intends to provide the highest accessible truth, it has to take ownership of faith. Such is the case when it accepts in itself the truths of faith, and even more, analyzes all other certainties in the light of such truths of faith, as the ultimate criterion. This also accounts for a formal dependence of philosophy on faith. (Stein 1993)

Given her Jewish origin and her allegiance to the teachings of Jesus Christ, Edith Stein died a Catholic martyr in Auschwitz concentration camp.

### CONCLUDING REMARKS

In the light of the foregoing, the work of these saints shows us that it is possible to overcome scientific reductionism, which is based on a misinterpretation of “I think, therefore I am.” Such reductionism goes totally against the integral nature of the human person where the spiritual component is an essential part. Along the same line, an absolute creationism will focus exclusively on man’s spiritual component, denying the possibility of finding the truth by contemplating creation

through understanding. Both should be replaced by a much broader perspective integrating the communion between science and faith, and also between body and soul. In our personal opinion, the life and work of the aforementioned saints constitute a proof that shows us that it is possible to be an intellectual devoted to both science and faith, and that no contradiction exists between both when truth is genuinely sought; on the contrary, faith and reason are mutually supporting. In this way, the natural sciences collaborate with theology, and theology collaborates with the natural sciences (Vicuña 2002). As way of synthesis, it is always worth remembering the words of Saint Augustine of Hippo, subsequently restated by Saint Anselm of Canterbury, *credo ut intelligam et intelligo ut credam*, i.e., we believe in order to understand and we understand in order to believe.

### BIOGRAPHICAL NOTE

Dr. Manuel E. Cortés is professor of physiology and physiopathology at the Departamento de Ciencias Químicas y Biológicas, Universidad Bernardo O’Higgins, Santiago; and a post-doctoral researcher at the Reproductive Health Research Institute (RHRI), Santiago Chile.

Juan Pablo del Río is currently pursuing a degree in medicine and surgery and studying philosophy at the Universidad de los Andes, Santiago, Chile.

Dr. Pilar Vigil is associate professor at the Pontificia Universidad Católica de Chile, Santiago, and medical director of the RHRI, Santiago, Chile. In addition, Dr. Vigil is a member of the Pontifical Academy for Life, Vatican City, and president of Teen STAR International. The authors wish to thank Miss Isabella Montero for her useful comments about this editorial. The authors may be

contacted through Dr. Manuel E. Cortés, Departamento de Ciencias Químicas y Biológicas, Universidad Bernardo O'Higgins, General Gana 1702, Santiago, Chile. Email: manuel.cortes@ubo.cl

## ENDNOTES

1. Science, from the Latin *scientia*, means knowledge, which comes from the verb *scire*, to know (cf. Eto 2008). However, the origin of the term “science” dates back to the Indo-European term *skei*, referring to the capacity to cut or separate one thing from another to distinguish them. Thus, from an epistemological and historical point of view, from ancient times science has been closely linked to identifying one thing as separate from the other in order to get to know it.
2. Etymologically, “faith” comes from the Latin *fidēs*, a term related to the Proto-Indo-European *\*bʰeydʰ*, that means “to trust.”

## REFERENCES

- Aquinas, Saint Thomas. 1947. *Summa Theologica*. North Carolina: Hayes Barton Press.
- Ayala, F.J. 2007. *Darwin y el Diseño Inteligente*. Madrid: Alianza Editorial.
- Carroll, W.E. 2003. *La Creación y las Ciencias Naturales. Actualidad de Santo Tomás de Aquino*. Santiago de Chile: Ediciones Universidad Católica de Chile.
- Cortés, M.E. and A.A. Alfaro. 2013. Sobre los fundamentos epistemológicos e históricos de la ciencia: algunas reflexiones. *Revista Chilena de Educación Científica* 12: 49–57.
- Crick, F. 1994. *The astonishing hypothesis: The scientific search for the soul*. New York: Scribner.
- Descartes, R. 1637. *Discours de la Méthode pour bien conduire sa raison, et chercher la vérité dans les sciences*. Leiden: Ian Maire.
- Eto, H. 2008. Scientometric definition of science: In what respect is the humanities more scientific than mathematical and social sciences? *Scientometrics* 76: 23–42.
- Hayward, J.L. 1998. *The creation/evolution controversy: An annotated bibliography*. Lanham: Scarecrow Press/Salem Press.
- John of the Cross, Saint. ed. 2009. Subida al Monte Carmelo. In *Obras Completas San Juan de la Cruz*, 151–432. Madrid: Editorial de Espiritualidad.
- John Paul II, Pope. 1998. *Faith and reason: Encyclical letter Fides et ratio of the Supreme Pontiff John Paul II to the bishops of the Catholic Church on the relationship between faith and reason*. Washington, DC: Veritas.
- John Paul II, Pope. 1999. Address at meeting with rectors of academic institutions, Torun, Poland, June 7, 1999. [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/travels/documents/hf\\_jp-ii\\_spe\\_07061999\\_torun\\_en.html](http://www.vatican.va/holy_father/john_paul_ii/travels/documents/hf_jp-ii_spe_07061999_torun_en.html).
- Moscato, G. 1906. La salda d'amido iniettata nell'organismo nota 2: Ritenzione dell'amido e trasformazione in glicogeno: ricerche sperimentali del Dott. Giuseppe Moscato. *Atti della R. Accademia Medico-Chirurgica di Napoli* 2: 1–12.
- Moscato, G. 1907. Il glicogeno nella placenta muliebre andamento e meccanismo della sua scomparsa dopo l'emissione. Valore medico legale: ricerche sperimentali del Dott. Giuseppe Moscato. *Atti della R. Accademia Medico-Chirurgica di Napoli* 2: 1–11.
- Ortega, L. 2010. Alberto Magno: Patrón de los Científicos. *Revista de Química PUCP* 24: 26–30.
- Reed, K. 1980. Albert on the natural philosophy of plant life. In *Albertus magnus and the sciences: Commemorative essays*. ed. J.A. Weisheipl, 341–5. Toronto: Pontifical Institute of Mediaeval Studies.
- Stein, E. 1993. *Erkenntnis und Glaube*. Freiburg: Herder.
- Stein, E. 2003. *La Estructura de la Persona Humana*. Madrid: Biblioteca de Autores Cristianos.
- Valderas, J.M. 1987. Anatomía vegetal en San Alberto Magno. *Collectanea Botanica (Barcelona)* 17: 125–34.
- Vicuña, R. 2002. Las ciencias naturales colaboran con la teología. *Teología y Vida* 43: 53–73.
- Wojtyła, K. 1979. *La Fe Según San Juan de la Cruz*. Madrid: Biblioteca de Autores Cristianos.
- Yahr, M.G. 2008. ¿Hay o no “diseño inteligente” en el origen de la vida? Es esta una controversia científica? *Interciencia* 33: 165–6.