# In Defense of the Rationality of Faith: The Relevance of the Encyclical Letter *Fides et Ratio*

W obronie rozumności wiary. Aktualność przesłania encykliki *Fides et ratio* 

### Andrzej Anderwald<sup>1</sup>

University of Opole Faculty of Theology

**Abstract:** The 25th anniversary of St. John Paul II's (1978–2005) proclamation of the encyclical *Fides et Ratio* (1998) prompts reflection on the rationality of faith. The defense of the Christian faith today occurs within the context of scientific thinking, where scientific methods of understanding the world and the natural image of the world itself play significant roles. This article aims to identify potential areas for defending the rationality of the Christian faith. The discussion will present the following inspirations in sequence: interdisciplinary dialogue (1), the Church's openness to science (2), and the integration of natural knowledge in theological reflection (3).

**Keywords:** St. John Paul II, Church, theology, science, scientific view of the world, relationship between faith and reason, justification of faith

**Abstrakt:** 25. rocznica ogłoszenia przez św. Jana Pawła II (1978–2005) encykliki *Fides et ratio* (1998) inspiruje do refleksji nad rozumnością wiary. Obrona wiary chrześcijańskiej dokonuje się dziś w klimacie myślenia naukowego, w którym ważną rolę odgrywają naukowe sposoby poznawania świata, jak również sam przyrodniczy obraz świata. Celem artykułu jest próba wskazania na możliwe pola obrony rozumności wiary chrześcijańskiej. W toku prowadzonych rozważań zostaną kolejno przedstawione następujące inspiracje do: dialogu interdyscyplinarnego (1); otwarcia Kościoła na nauke (2); odwoływania sie do wiedzy przyrodniczej w refleksji teologicznej (3).

**Słowa kluczowe:** św. Jan Paweł II, Kościół, teologia, nauki przyrodnicze, naukowy obraz świata, relacja między wiarą i rozumem, uzasadnianie wiary

<sup>&</sup>lt;sup>1</sup> Reverend Andrzej Anderwald—professor of Fundamental Theology and Science of Religion at the University of Opole, Faculty of Theology; e-mail: anderw@uni.opole.pl; https://orcid.org/0000-0001-5932-9845.

Speaking about faith in contemporary times occurs within a culture where the natural sciences and associated technological progress play significant roles. In this cultural context, Christians concerned with the rationality of their faith must delve into its rational dimension and seek adequate ways to justify it. This effort does not imply a desire to diminish the other dimensions of faith, which are personal acts involving volitional, emotional, and supernatural aspects (see CCC 154).<sup>2</sup> Rather, it aims to demonstrate the connection between faith, ultimately unprovable, and the world, along with its rational concepts. This ongoing task for theology, as a reflection on the Christian faith—fides querens intellectum ensures that faith is experienced in a manner worthy of reason. The 25th anniversary of the publication of St. John Paul II's encyclical Fides et Ratio (1998) provides an opportune moment to reflect on this statement. Conferences organized by various academic centers in Poland on this occasion have rediscovered the relevance of the papal document's message.<sup>3</sup> The aim of these discussions is to identify possible fields for defending the rationality of Christian faith in the context of contemporary scientific and technological challenges. This research task is undertaken in light of inspirations stemming from the papal encyclical.

During the ongoing considerations, the following inspirations will be sequentially presented: interdisciplinary dialogue (1), opening the Church to science (2), and referencing natural knowledge in theological reflection (3).

# 1. Inspiration for interdisciplinary dialogue

For understanding the various stages of concern for the rationality of faith in the history of Christianity, the contents of the fourth chapter of the encyclical *Fides et Ratio*, titled *The relationship between faith and reason*, are particularly significant. John Paul II begins his considerationswith the initial small syntheses of God's revelation with Greek philosophy present in the thoughts of St. Justin and Clement of Alexandria (see FR 38–39).<sup>4</sup> He then transitions through the per-

<sup>&</sup>lt;sup>2</sup> See *Catechism of the Catholic Church* (CCC), https://www.vatican.va/archive/ENG0015/\_INDEX.HTM [accessed: 10.1.2024].

<sup>&</sup>lt;sup>3</sup> See e.g. Akademia Kultury Społecznej i Medialnej w Toruniu, Konferencja naukowa: *Kondycja Myślenia. 25 lat po encyklice "Fides et Ratio"* (28.10.2023); Katolicki Uniwersytet Lubelski Jana Pawła II, Międzynarodowa konferencja naukowa: *Faith, Reason, and Truth. On the 25th Anniversary of John Paul II's "Fides et ratio"* (25.10.2023); Uniwersytet Kardynała Stefana Wyszyńskiego w Warszawie, Konferencja apologetyczna: *Dwa skrzydła — wiara i rozum* (21.10.2023); Uniwersytet Papieski Jana Pawła II w Krakowie, Konferencja naukowa: *Biblia i społeczeństwo. Osoba ludzka wyrażana wiarą i rozumem — 25 rocznica encykliki "Fides et ratio" św. Jana Pawła II* (26.5.2023).

<sup>&</sup>lt;sup>4</sup> See John Paul II, Encyclical letter *Fides et Ratio*, 14 September, 1998 (FR), https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\_jp-ii\_enc\_14091998\_fides-et-ratio.html [accessed: 15.1.2024].

spective of the early Christian apologists, who emphasized the independence of faith from philosophical knowledge, well characterized by Tertullian's polemical question (circa 160–240): "What does Athens have in common with Jerusalem? The Academy with the Church?" (FR 41). The Pope devotes the most attention to the great syntheses of thinkers such as Saint Augustine, Saint Anselm of Canterbury, Saint Albert the Great, and Saint Thomas Aquinas. Alongside the clearly present tendency in the views of Dominican saints towards the synthesis of faith and reason, these thinkers were among the first to emphasize the need to respect the autonomy of philosophical thought. It should be noted that the otherwise valid distinction between the realm of faith and that of reason, starting from the late Middle Ages, led to an increasingly deepening division between faith and reason. Gradually, this resulted in the emergence of a philosophy practically detached from the content of faith. This stage began to intensify with the development of autonomous specialized sciences, particularly the natural sciences, reaching its peak in the philosophical views of the 19th and early 20th centuries associated with the activities of the Vienna Circle (Rudolf Carnap, Moritz Schlick, Victor Kraft) and the Frankfurt School (Max Horkheimer, Theodor Adorno, Herbert Marcuse). The Pope directly addresses the drama of the division between faith and philosophical reason (see FR 45), which eventually led to the questioning of the rationality of faith in the name of a "new" model of rationality by the scientific community. Aware of these tendencies and their implications in modern times, the Pope concludes his reflections on the history of the relationship between faith and reason with a decisive call "that faith and philosophy recover the profound unity which allows them to stand in harmony with their nature without compromising their mutual autonomy" (FR 48). The appeal for engaging in dialogue with philosophy is directed not only to theologians but also to philosophers, aiming to restore a "harmonious and creative relationship between theology and philosophy" (FR 63). A direct encouragement for this kind of cooperation is found in a particularly notable fragment of the encyclical, where more recent thinkers closer to our time are explicitly mentioned, such as John Henry Newman, Edith Stein, Antonio Rosmini, Jacques Maritain, Etienne Gilson, Vladimir S. Solovyov, Pavel A. Florensky, Pyotr Chaadayev, and Vladimir N. Lossky. These thinkers did not shy away from philosophical inquiries confronting the truths of faith, and their works provide examples of building relationships between philosophy and the Word of God (see FR 74). As the Pope states, "these are tasks which challenge reason to recognize that there is something true and rational lying far beyond the straits within which it would normally be confined" (FR 76). Such considerations always present an opportunity to lead reason out of the self-limitation imposed by the modern paradigm of science. Theology itself, as a critical reflection conducted in the light of faith, needs philosophy "as a partner in dialogue in order to confirm the intelligibility and universal truth of its claims" (FR 77). The

theologian *ex professo* is obliged to use philosophy while maintaining a properly understood autonomy of thought. Rational reflection on the content of God's revelation can become a true link and space for encounter between theologians and philosophers.

In the invitation directed by the Pope to theologians and philosophers for mutual dialogue, one can discern an inspiration to engage in dialogue with other sciences, thus giving theological reflection an interdisciplinary profile. This involves seeking the mutual interpenetration of fides et ratio not only in the encounter between theology and philosophy but also within the framework of the dialogue between theology and other sciences, conducted with varying intensity in modern times. Such an interpretation is supported by the words of recognition and appeal contained in the conclusion of the encyclical, addressed to all scientists, which emphasize "the sapiential horizon within which scientific and technological achievements are wedded to the philosophical and ethical values which are the distinctive and indelible mark of the human person" (FR 106). Scientists are well aware that the search for truth, even when it concerns the finite reality of the world or of man, is never-ending, but always points beyond to something higher than the immediate object of study, to the questions that give access to Mystery (see FR 106). This acknowledgement of representatives from the natural sciences is not coincidental, considering John Paul II's involvement in interdisciplinary meetings and discussions, both before and after being elected Pope.<sup>5</sup> In the course of further considerations, the actions of John Paul II and his successors, which align well with his initiative to open the Church to science, will be presented, defining important areas for defending the rationality of faith.

## 2. The inspiration for opening the Church to science

The exceptional opening of the Church to science occurred during the pontificate of John Paul II, who emphasized not only the necessity and possibility of dialogue between the Church and the sciences but also sought to define its subject matter and conditions more precisely. In one of his first speeches to the members of the Pontifical Academy of Sciences (1979) on the occasion of Albert Einstein's 100th birthday (1879–1955), the Pope articulated the conditions for the encounter between the Church and the world of science. As a preliminary requirement, he highlighted the need to rectify historical misunderstandings that may have arisen in interactions between representatives of the Church's Magiste-

<sup>&</sup>lt;sup>5</sup> See T. Słabik, *Działalność naukowa Karola Wojtyły w okresie krakowsko-lubelskim (1945–1978)*, "Perspektiva. Legnickie Studia Teologiczno-Historyczne" 17 (2018), no. 2, pp. 182–200; A. Anderwald, *St. John Paul II's Ideas of Dialogue between the Church and Science*, "Roczniki Teologiczne" 63 (2016), no. 9, pp. 81–94.

rium and secular scientists.<sup>6</sup> An important contribution by John Paul II to further defining the conditions for cooperation between the Church and science was his Letter to Reverend George V. Coyne, S.J. director of the Vatican Observatory, commemorating the 300th anniversary of Newton's Philosophiae Naturalis Principia Mathematica.<sup>7</sup> Another instance of the Church's openness to science is John Paul II's encouragement to foster collaboration between Christian theology and other sciences within the academic realm, as expressed in two apostolic constitutions: *Sapientia Christiana* on ecclesiastical universities and faculties, and *Ex corde Ecclesiae* on Catholic universities.<sup>8</sup> Both constitutions establish legal frameworks and provide clear encouragement for interdisciplinary cooperation within Church-affiliated universities among faculties representing various fields of study. Such collaborative endeavours, as the Pope asserts, "not only assist humanity in their continuing quest for the truth, this research provides an effective witness, especially necessary today, to the Church's belief in the intrinsic value of knowledge and research."<sup>9</sup>

An important initiative in opening the Church to science, particularly empirical sciences, was undertaken by John Paul II through interdisciplinary meetings at Castel Gandolfo. These meetings not only exemplify cooperation between representatives of the Church and Christian theology with scholars from diverse scientific disciplines but also demonstrate a commitment to humanity and the advancement of human thought. This commitment is evident in the recognition of the complementary nature of various fields of human knowledge and cultures.<sup>10</sup>

The designated fields for defending the rationality of faith, as illuminated by the documents mentioned, including the encyclical *Fides et Ratio*, find continuity among John Paul II's successors. During the pontificate of Benedict XVI (2005–2013), the Church's openness to science was exemplified by the continuation of

<sup>&</sup>lt;sup>6</sup> John Paul II, *On the Centenary of the Birth of Albert Einstein* (November 10, 1979), no. 4 (from *Discourses of the Popes from Pius XI to John Paul II to the Pontifical Academy of Sciences 1936–1986*; Vatican City: Pontifica Academia Scientiarum 1986, pp. 151–156), https://www.ewtn.com/catholicism/library/on-the-centenary-of-the-birth-of-albert-einstein-7953 [accessed: 15.2.2024].

<sup>&</sup>lt;sup>7</sup> Id., Letter to Reverend George V. Coyne, S.J. director of the Vatican Observatory (June 1, 1988) (the full text see: http://www.vatican.va/holy\_father/john\_paul\_ii/letters/1988/documents/hf jp-ii let 19880601 padre-coyne en.html) [accessed: 20.8.2015].

<sup>&</sup>lt;sup>8</sup> Id., Apostolic Constitution *Sapientia Christiana*, April 15, 1979, https://www.vatican.va/content/john-paul-ii/en/apost\_constitutions/documents/hf\_jp-ii\_apc\_15041979\_sapientia-christiana.html [accessed: 15.1.2024]; Id., Apostolic Constitution *Ex corde Ecclesiae*, August 15, 1990 https://www.vatican.va/content/john-paul-ii/en/apost\_constitutions/documents/hf\_jp-ii\_apc\_15081990\_ex-corde-ecclesiae.html [accessed: 15.1.2024].

<sup>&</sup>lt;sup>9</sup> Id., Ex corde Ecclesiae..., no. 15.

<sup>&</sup>lt;sup>10</sup> K. Michalski, *Castel Gandolfo*, in: *Rozmowy w Castel Gandolfo*, red. K. Michalski, Warszawa–Kraków 2010, vol. 1, pp. 5–14.

interdisciplinary meetings at Castel Gandolfo. The first such meeting on the topic of creation and evolution occurred in September 2006, gathering 40 scientists from diverse disciplines including philosophers, naturalists, and theologians. Also significant for fostering an open dialogue between the Church and the world of science was the widely discussed papal lecture at the University of Regensburg titled *Faith*, *Reason*, *and University: Memories and Reflections* (12.9.2006), delivered during the papal pilgrimage to Bavaria. The content of the lecture provides important commentary and elaboration on the themes explored in the encyclical *Fides et Ratio*, particularly concerning challenges posed by the division between faith and reason.

In his lecture at Regensburg, Pope Benedict XVI defends the place of theology in the university and its capacity to collaborate with other disciplines, subjecting the process of the Hellenization of Christianity to critical analysis. Theology, tasked with reflecting on the rational dimension of faith, is a science and thus rightfully occupies a place alongside other sciences in the university.<sup>13</sup> Departments of Catholic and Protestant Theology, due to their exploration of the rationality of faith, constitute integral components of the universitas scientiarum. The presence of theology in the university, grounded in the belief in the possibility of reconciling reason with faith thereby discussing the rationality of faith, is jeopardized by the perilous process of reason being detached from faith. This phenomenon, known as the dehellenization of Christianity, perpetually threatens the rationality of faith.<sup>14</sup> By subjecting this process to critical scrutiny, Benedict XVI upholds the significance of human reason and its universality. This stance implies a heightened openness of theology to metaphysics or philosophical thought in general. The current emphasis under this Pope on interdisciplinary dialogue appears to stem not only from concern for the scholarly nature of theology but also from a broader concern for humanity. Reason, which limited to what is technically achievable, ultimately fails to address the question of God. Therefore, the Church's engagement with science, modeled after dies academicus mentioned by Benedict, merits a place in the university and in extensive scientific discourse.<sup>15</sup> Such dialogue between reason and faith consistently serves to substantiate the rationality of faith.

<sup>&</sup>lt;sup>11</sup> See *Schöpfung und Evolution. Eine Tagung mit Papst Benedikt XVI in Castel Gandolfo*, hrsg. v. S.O. Horn, S. Wiedenhofer, Augsburg 2007.

Benedict XVI, Faith, Reason and the University. Memories and Reflections https://www.vatican.va/content/benedict-xvi/en/speeches/2006/september/documents/hf\_ben-xvi\_spe\_20060912\_university-regensburg.html [accessed: 10.1.2024].

<sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Ibid. See also K. Góźdź, *Teologia — uniwersytet — nauka w myśli Josepha Ratzingera/ Benedykta XVI*, "Studia Nauk Teologicznych" 3 (2008), pp. 101–118.

<sup>15</sup> Benedict XVI, Faith...

The Church's openness to science is prominently reflected in the teachings of Pope Francis (2013-). The encyclical Laudato si' (2015), along with the post-synodal apostolic exhortation *Querida Amazonia* (2020), authored by the Pope, clearly demonstrates the Magisterium's receptivity to Earth and environmental sciences (see LS 23–29; QA 43–49), <sup>16</sup> biological sciences (see LS 32–42; QA 43-49), and social sciences (see LS 43-52; QA 8-27). Further highlighting the Church's openness to science is the papal apostolic constitution Veritatis gaudium on universities and faculties of the Church (2017), which promotes interdisciplinary dialogue between Church-affiliated research centers and various scientific disciplines (see VG 5).<sup>17</sup> Additionally, the recent papal apostolic exhortation Laudate Deum (2023) aligns with the Magisterium's endorsement of empirical sciences essential for assessing ecological threats (see LD 6-7, 13-14)<sup>18</sup> and technological progress (see LD 20–28). Such an approach implicitly encourages dialogue between theology and other sciences. While these examples of the Church's engagement with science vary in focus, they are unified by a shared commitment to defending the rationality of Christian faith.

#### 3. Inspiration for incorporating natural knowledge into theology

The dynamic development of natural and technological sciences presents theologians with a challenge to uphold the rationality of faith by integrating natural knowledge into theological reflection. Specifically, this entails providing a robust justification for the truths of faith that acknowledges the prevailing scientific and naturalistic worldview, which shapes the mindset of contemporary individuals. Today's Christians seek, on one hand, internal justifications of faith (*ad intra*) to strengthen personal religious convictions based on rational grounds, and on the other hand, they require arguments that enable them to defend their beliefs and engage in dialogue with the broader world (*ad extra*).

<sup>&</sup>lt;sup>16</sup> Francis, Encyclical letter *Laudato si'*, 24 May 2015 (LS), https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\_20150524\_enciclica-laudato-si.html [accessed: 18.1.2024]; Id., Post-synodal Apostolic Exhortation *Querida Amazonia*, 20 February 2020 (QA), https://www.vatican.va/content/francesco/en/apost\_exhortations/documents/papa-francesco\_esortazione-ap\_20200202\_querida-amazonia.html [accessed: 18.1.2024].

<sup>&</sup>lt;sup>17</sup> Francis, Apostolic Constitution *Veritatis gaudium*, 27 December 2017 (VG), https://www.vatican.va/content/francesco/en/apost\_constitutions/documents/papa-francesco\_costituzione-ap\_20171208\_veritatis-gaudium.html [accessed: 24.1.2024].

<sup>&</sup>lt;sup>18</sup> Francis, Apostolic Exhortation *Laudate Deum* (LD), https://www.vatican.va/content/francesco/en/apost\_exhortations/documents/20231004-laudate-deum.html [accessed: 24.1.2024].

Seeking positive justifications for the truths of faith adapted to the mentality of the early 21st century entails considering the current naturalistic worldview. 19 It is noteworthy that this approach to justifying faith in the context of science is not novel but has been prevalent in post-conciliar theology, influenced by the Pastoral Constitution on the Church in the Modern World, Gaudium et spes (1965). For instance, Catholic theologian, Karl Rahner (1904–1984), in his work Foundations of Christian Faith, underscores the theologian's imperative to engage directly with historical, sociological, and natural sciences, bypassing traditional philosophical intermediaries.<sup>20</sup> The incorporation of natural knowledge is particularly evident in theological reflections concerning topics such as the creation of the world and humanity, reinterpretations of original sin in light of scientific insights, and the understanding of miracles. The theological reflection on God as the Creator of the world and humanity has been a central theme since the early Christian treatises on creation. Such reflection cannot occur in isolation from the natural worldview. Hence, it is understandable that the utilization of natural knowledge in theology is most frequently discussed in relation to the theme of creation. Numerous Catholic theologians, including Karl Rahner, Leo Scheffczyk (1920–2005), Alexandre Ganoczy (b. 1928), Karl Schmitz-Moormann (1928–1996); Protestant theologians such as Wolfahrd Pannenberg (1928–2014), Jürgen Moltmann (b. 1926), Christian Link (b. 1938), Hans Schwarz (b. 1939); and Anglican theologians like Arthur Peacocke (1924–2006) and John Polkinghorne (1930–2021),<sup>21</sup> reference natural knowledge in their theological works on creation. Another area within systematic theology where theologians draw upon natural knowledge is the interpretation of original sin in light of evolutionary theory. Raymond Schwager (1935–2004), among others, reinterpretation of Catholic doctrine on original sin to reconcile it with the evolutionary worldview.<sup>22</sup> The topic of the scientific understanding of miracles is also an intriguing field for research into the application of natural knowledge in theological reflection. In discussions concerning the role of natural science findings in understanding miracles, the perspectives of Catholic theologians who are also trained in contemporary physics, such as Heimo Dolch (1912-1984) and Wolfgang Büchel (1920-1989), are particularly pertinent. Their contributions emphasize the significance of natural knowledge and consideration of the prevailing worldview in theological reflections on miracles.<sup>23</sup>

<sup>&</sup>lt;sup>19</sup> J.A. Bracken, *A new methodology for Christian systematic theology*, "Zygon: Journal of Religion and Science" 54 (2019), no. 3, pp. 575–577.

<sup>&</sup>lt;sup>20</sup> K. Rahner, *Grundkurs des Glaubens. Einführung in den Begriff des Christentums*, Freiburg im Breisgau 2008<sup>12</sup>, p. 14.

<sup>&</sup>lt;sup>21</sup> See A. Anderwald, *Teologia a nauki przyrodnicze. Rola wiedzy przyrodniczej w docieka-niach teologicznych*, Opole 2007, pp. 60–95.

<sup>&</sup>lt;sup>22</sup> Ibid., pp. 141–146.

<sup>&</sup>lt;sup>23</sup> Ibid., pp. 180–189.

The changes in the interpretation of theological issues related to the doctrine of creation, original sin, and miracles among the theologians mentioned were influenced not only by advancements in biblical studies but also by developments in the natural sciences and reflections on their methodologies. Such considerations consistently contribute to the defense of the rationality of faith and the evolution of theology, which acknowledges the necessity of reinterpreting certain doctrinal aspects while embracing the contemporary natural context as a foundational backdrop for theological discourse. Emphasizing the thelogical engagement with natural sciences does not imply an intent to construct new forms of intellectual apologetics.

A theologian seeking to explore the rationality of faith today must necessarily draw from all that non-theological sciences can offer.<sup>25</sup> A positive example of new forms of interplay between reason and faith in the dialogue between theology and the natural sciences is provided by the work of contemporary theologians who are also representatives of various natural science disciplines. For instance, in the English-speaking world, Anglican theologian and biophysicist Alister Edgar McGrath (b. 1953) is known for his defense of the Christian faith in debates with Richard Dawkins (b. 1941).<sup>26</sup> Similarly, Andrew Pinsent (b. 1966), a Catholic theologian, physicist, and director of the Ian Ramsey Center for Science and Religion at the University of Oxford, exemplifies this interdisciplinary approach. Pinsent is the author of scientific works in the fields of physics, philosophy, and Christian anthropology.<sup>27</sup> He is also actively involved in organizing and conducting catechetical-evangelistic courses and editing three series: *Credo*, *Apologia*, and *Lumen*, which incorporate contemporary understandings of the world into the interpretation of Christian faith truths.<sup>28</sup>

In the German-speaking context, examples of referencing natural knowledge can be found in the works of two Catholic theologians: Ulrich Lüke (b. 1951) and Dieter Hattrup (b. 1948). Lüke, also a biologist, specializes in the topic of crea-

<sup>&</sup>lt;sup>24</sup> See M. Heller, *Nauka i Teologia — niekoniecznie tylko na jednej planecie*, Kraków 2019, pp. 61–68; Id., *Nowa fizyka i nowa teologia*, Kraków 2015<sup>4</sup>, pp. 154–161.

<sup>&</sup>lt;sup>25</sup> See J.A. Bracken, A new methodology..., pp. 582–585.

<sup>&</sup>lt;sup>26</sup> See A. McGrath, *The Foundations of Dialogue in Science and Religion*, Oxford 1991; Id., *Darwinism and the Divine: Evolutionary Thought and Natural Theology*, Oxford 2011; Id., J. Collicutt-McGrath, *The Dawkins Delusion?: Atheist Fundamentalism and the Denial of the Divine*, London 2007.

<sup>&</sup>lt;sup>27</sup> See e.g. A. Pinsent, *The Second-Person Perspective in Aquinas's Ethics: Virtues and Gifts*, New York 2012; Id., *Cosmic Purpose and the Question of a Personal God*, "European Journal for Philosophy of Religion" 5 (2013), no. 1, pp. 109–124.

<sup>&</sup>lt;sup>28</sup> See A. Pinsent, M. Holden, *Credo: The Catholic Faith Explained*, London 2007; Eid., *Apologia: Catholic Answers* to *Today's Questions*, London 2010; Eid., *Lumen: The Catholic Gift to Civilisation*, London 2011.

tion and evolution, and has authored numerous scientific papers on evolutionary theory and its philosophical-theological implications.<sup>29</sup> His latest book presents the Christian creed in light of questions inspired by the current state of knowledge about the development of the world and humanity, aligning well with the defense of the rationality of faith.<sup>30</sup> Conversely, Hattrup, a theologian and physicist, integrates knowledge from quantum physics<sup>31</sup> into the theology of creation promotes the dialogue between theology and the natural sciences in his published series provocatively titled *Darwin als Kirchenvater*.<sup>32</sup>

In the Polish context, an example of engagement in the relationship between religion and science is the multifaceted activity of Rev. Prof. Michał Heller (b. 1936), a cosmologist, philosopher, and laureate of the Templeton Prize (2008). He is the founder and director of the Copernicus Center for Interdisciplinary Studies in Krakow.<sup>33</sup> Besides his scientific contributions to cosmology and the philosophy of nature, Heller has authored works on the dialogue between theology and the natural sciences. He also addresses the relationship between religion and science in popular science lectures, reaching a wider audience interested in the important relationship between reason and faith through their availability on YouTube.<sup>34</sup> Another successful example of theological reflection that considers the changing worldview is the book Evolutionary Theology,35 authored by Wojciech Grygiel, a chemist, philosopher of nature, and theologian, along with Damian Wasek, a theologian. All the mentioned thinkers, by incorporating references to natural knowledge into their works, outline an important strategy for defending the rationality of Christian faith against the claims of representatives of a techno-scientific mentality.

<sup>&</sup>lt;sup>29</sup> See U. Lüke, "Als Anfang schuf Gott" — Bio-Theologie: Zeit — Evolution — Hominisation, Paderborn—München—Wien 1997; Id., Das Säugetier von Gottes Gnaden: Evolution, Bewusstsein, Freiheit, Freiburg—Basel—Wien 2016<sup>3</sup>; Der Mensch — ein Tier. Und sonst? Interdisziplinäre Annäherungen, hrsg. v. U. Lüke, G. Souvignier, Freiburg—Basel—Wien 2020.

<sup>&</sup>lt;sup>30</sup> See U. Lüke, *Das Glaubensbekenntnis vor den Anfragen der Gegenwart*, Freiburg–Basel–Wien 2020.

<sup>&</sup>lt;sup>31</sup> See e.g. D. Hattrup, *Einstein und der würfelnde Gott. An den Grenzen des Wissens in Naturwissenschaft und Theologie*, Freiburg im Breisgau–Basel–Wien 2001; Id., *An den Grenzen des Wissens in Naturwissenschaft*, Freiburg in Breisgau–Basel–Wien 2008.

<sup>&</sup>lt;sup>32</sup> See Id., *Darwin als-Kirchenväter*, vol. 1–10. Paderborn 2010–2014.

<sup>&</sup>lt;sup>33</sup> See M. Heller, *Centrum Copernicus*, https://www.copernicuscenter.edu.pl/person/michal-heller [accessed: 15.2.2024].

<sup>&</sup>lt;sup>34</sup> See Id., *Ważniejsze niż Wszechświat*, https://www.youtube.com/watch?v=iPh1s9glxx8 [accessed: 20.2.2024]; Id., *O wieczności*, https://www.youtube.com/watch?v=Q0edQgy056Q [accessed: 20.2.2024].

<sup>&</sup>lt;sup>35</sup> See W. Grygiel, D. Wąsek, *Teologia ewolucyjna. Założenia — problemy — hipotezy*, Kraków 2022.

\*\*\*

In summary, the encyclical Fides et Ratio continues to inspire the search for new forms of interaction between faith and reason within the Church's openness to science and theology's dialogue with other disciplines. It can be reasonably assumed that if St. John Paul II were to write his encyclical today, alongside the philosophers mentioned, he would also include the names of scientists open to dialogue with theology. The interest in natural knowledge and the natural image of the world is a reflection of contemporary expectations, needs, and demands. Therefore, theologians who wish to defend the rationality of faith must consider the contributions of other disciplines and ensure the interdisciplinary nature of theological research.<sup>36</sup> Theological studies should not be seen as alternatives to other research perspectives but as important complements that lead to a comprehensive understanding of reality, which no single science can fully grasp. Ultimately, the dialogue between theology and other sciences is crucial for justifying the rationality of faith. This dialogue enhances the credibility of Christian revelation and demonstrates that God's revelation indeed occurred in history and continues to live within the Church of Christ.

#### References

- Anderwald A., St. John Paul II's Ideas of Dialogue between the Church and Science, "Roczniki Teologiczne" 63 (2016), no. 9, pp. 81–94.
- Anderwald A., *Teologia a nauki przyrodnicze. Rola wiedzy przyrodniczej w dociekaniach teologicznych*, Opole: RWWT 2007.
- Benedict XVI, Faith, Reason and the University. Memories and Reflections https://www.vatican.va/content/benedict-xvi/en/speeches/2006/september/documents/hf\_ben-xvi\_spe 20060912 university-regensburg.html [accessed: 10.1.2024].
- Bracken J.A., *A new methodology for Christian systematic theology*, "Zygon: Journal of Religion and Science" 54 (2019), no. 3, pp. 575–587.
- Catechism of the Catholic Church (CCC), https://www.vatican.va/archive/ENG0015/\_IN-DEX.HTM [accessed: 10.1.2024].
- *Der Mensch ein Tier. Und sonst? Interdisziplinäre Annäherungen*, hrsg. v. U. Lüke, G. Souvignier, Freiburg–Basel–Wien: Herder 2020.
- Francis, Apostolic Constitution *Veritatis gaudium*, 27 December 2017 (VG), https://www.vatican.va/content/francesco/en/apost\_constitutions/documents/papa-francesco\_costituzione-ap\_20171208\_veritatis-gaudium.html [accessed: 24.1.2024].
- Francis, Apostolic Exhortation *Laudate Deum* (LD), https://www.vatican.va/content/francesco/en/apost exhortations/documents/20231004-laudate-deum.html [accessed: 24.1.2024].

<sup>&</sup>lt;sup>36</sup> See Ch. Seitz, *Dialog auf Metaebene. Wissenschaftstheoretische und historische Überlegungen zur Interdisziplinarität von Theologie und Naturwissenschaft*, "Theologie und Glaube" 64 (2021), no. 3, pp. 201–204.

- Francis, Encyclical letter *Laudato si'*, 24 May 2015 (LS), https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\_20150524\_enciclica-laudato-si. html [accessed: 18.1.2024].
- Francis, Post-synodal Apostolic Exhortation *Querida Amazonia*, 20 February 2020 (QA), https://www.vatican.va/content/francesco/en/apost\_exhortations/documents/papa-francesco esortazione-ap 20200202 querida-amazonia.html [accessed: 18.1.2024].
- Góźdź K., *Teologia uniwersytet nauka w myśli Josepha Ratzingera/Benedykta XVI*, "Studia Nauk Teologicznych" 3 (2008), pp. 101–118.
- Grygiel W., Wąsek D., *Teologia ewolucyjna. Założenia problemy hipotezy*, Kraków: Copernicus Center Press 2022.
- Hattrup D., An den Grenzen des Wissens in Naturwissenschaft, Freiburg–Basel–Wien: Herder 2008.
- Hattrup D., *Darwin als-Kirchenväter*, vol. 1–10. Paderborn: CreateSpace Independent Publishing Platform 2010–2014.
- Hattrup D., Einstein und der würfelnde Gott. An den Grenzen des Wissens in Naturwissenschaft und Theologie, Freiburg im Breisgau-Basel-Wien 2001.
- Heller M., *Centrum Copernicus*, https://www.copernicuscenter.edu.pl/person/michal-heller [accessed: 15.2.2024].
- Heller M., Nauka i Teologia niekoniecznie tylko na jednej planecie, Kraków: Copernicus Center Press 2019.
- Heller M., Nowa fizyka i nowa teologia, Kraków: Copernicus Center Press 2015<sup>4</sup>.
- Heller M., *O wieczności*, https://www.youtube.com/watch?v=Q0edQgy056Q [accessed: 20.2.2024].
- Heller M., *Ważniejsze niż Wszechświat*, https://www.youtube.com/watch?v=iPh1s9glxx8 [accessed: 20.2.2024].
- John Paul II, Apostolic Constitution *Sapientia Christiana*, April 15, 1979, https://www.vatican.va/content/john-paul-ii/en/apost\_constitutions/documents/hf\_jp-ii\_apc\_15041979\_sapientia-christiana.html [accessed: 15.1.2024].
- John Paul II, Apostolic Constitution *Ex corde Ecclesiae*, August 15, 1990, https://www.vat-ican.va/content/john-paul-ii/en/apost\_constitutions/documents/hf\_jp-ii\_apc\_15081990\_ex-corde-ecclesiae.html [accessed: 15.1.2024].
- John Paul, Encyclical letter *Fides et Ratio*, 14 September, 1998 (FR), https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\_jp-ii\_enc\_14091998\_fides-et-ratio.html [accessed: 15.1.2024].
- John Paul II, Letter to Reverend George V. Coyne, S.J. director of the Vatican Observatory (June 1, 1988), http://www.vatican.va/holy\_father/john\_paul\_ii/letters/1988/documents/hf jp-ii let 19880601 padre-coyne en.html [accessed: 20.8.2015].
- John Paul II, On the Centenary of the Birth of Albert Einstein (November 10, 1979), no. 4 (from Discourses of the Popes from Pius XI to John Paul II to the Pontifical Academy of Sciences 1936-1986, Vatican City: Pontifica Academia Scientiarum 1986, pp. 151–156), https://www.ewtn.com/catholicism/library/on-the-centenary-of-the-birth-of-albert-einstein-7953 [accessed: 15.2.2024].
- Lüke U., "Als Anfang schuf Gott" Bio-Theologie: Zeit Evolution Hominisation, Paderborn—München—Wien: Ferdinand Schöningh 1997.

- Lüke U., Das Glaubensbekenntnis vor den Anfragen der Gegenwart, Freiburg-Basel-Wien: Herder 2020.
- Lüke U., Das Säugetier von Gottes Gnaden: Evolution, Bewusstsein, Freiheit, Freiburg-Basel-Wien: Herder 2016<sup>3</sup>.
- McGrath A., Darwinism and the Divine: Evolutionary Thought and Natural Theology, Oxford: Wiley-Blackwell 2011.
- McGrath A., *The Foundations of Dialogue in Science and Religion*, Oxford: Wiley-Blackwell 1991.
- McGrath A., Collicutt-McGrath J., *The Dawkins Delusion?: Atheist Fundamentalism and the Denial of the Divine*, London: SPCK Publishing 2007.
- Michalski K., *Castel Gandolfo*, in: *Rozmowy w Castel Gandolfo*, red. K. Michalski, Warszawa–Kraków: Znak 2010, vol. 1, pp. 5–14.
- Pinsent A., Cosmic Purpose and the Question of a Personal God, "European Journal for Philosophy of Religion" 5 (2013), no. 1, pp. 109–124.
- Pinsent A., *The Second-Person Perspective in Aquinas's Ethics: Virtues and Gifts*, New York: Routledge 2012.
- Pinsent A., Holden M., *Apologia: Catholic Answers* to *Today's Questions*, London: Catholic Truth Society 2010.
- Pinsent A., Holden M., *Credo: The Catholic Faith Explained*, London: Catholic Truth Society 2007.
- Pinsent A., Holden M., *Lumen: The Catholic Gift to Civilisation*, London: Catholic Truth Society 2011.
- Rahner K., *Grundkurs des Glaubens. Einführung in den Begriff des Christentums*, Freiburg im Breisgau: Herder 2008<sup>12</sup>.
- Schöpfung und Evolution. Eine Tagung mit Papst Benedikt XVI in Castel Gandolfo, hrsg. v. S.O. Horn, S. Wiedenhofer, Augsburg: Sankt Ulrich 2007.
- Seitz Ch., Dialog auf Metaebene. Wissenschaftstheoretische und historische Überlegungen zur Interdisziplinarität von Theologie und Naturwissenschaft, "Theologie und Glaube" 64 (2021), no. 3, pp. 198–208.
- Słabik T., Działalność naukowa Karola Wojtyły w okresie krakowsko-lubelskim (1945–1978), "Perspektiva. Legnickie Studia Teologiczno-Historyczne", 17 (2018), no. 2, pp. 182–200.