

Michael Welker

The Science and
Religion Dialogue

Past and Future

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is a perfectly coherent belief that the faithful God will not allow that pattern to be lost but will preserve it in the divine memory. This would not of itself comprise a human life beyond death for I believe that it is intrinsic to full humanity to be embodied in some way. We are not apprentice angels. True life after death therefore requires a further divine act of re-embodiment in some environment of God's choosing. In fact, the true Christian hope has always been expressed as resurrection and not simply as a kind of spiritual survival.

Yet there would be little point in making Abraham, Isaac and Jacob live again simply in order to die again. Hence resurrected embodiment must take place in a new form of 'matter', endowed with such strong self-organising principles that it is not subject to the thermodynamic drift to decay which characterises the matter of this world. It is at this point that the criterion of discontinuity comes into play. I see no scientific reason to suppose that such new 'matter' is not a coherent possibility. In theological terms, the divinely induced transition from matter to 'matter' is the transformation of the world of the old creation into the world of the new creation. The physical properties of our world are those appropriate to an evolving creation existing at some distance from the veiled presence of its Creator as it is allowed to 'make itself' (as Darwin's clergyman friend, Charles Kingsley, put it). In such an evolving world the death of one generation is the necessary cost of the new life of the next. Yet God's ultimate purpose for the new creation is that it should be drawn ever closer into the unveiled life of its Creator, so that it is not a world of transience and decay and its 'matter' will have the properties that are appropriate to its redeemed status.

I believe that human beings are not only intrinsically embodied beings but also intrinsically temporal beings. Our destiny is not the timeless experience of the Beatific Vision, but an everlasting process of sanctification in which the inexhaustible riches of the divine nature are endlessly revealed in ever-increasing depth. Finite creatures cannot take in the Infinite at a glance.

This brief review of contemporary eschatological thinking necessarily involves some speculative ideas, but for the Christian it rests on the firm foundations of the faithfulness of the Creator and the Resurrection of Christ. The discussion is necessarily interdisciplinary, since it must draw on insights from science, anthropology and theology. Its pursuit will require the participation of scholars from all these disciplines. The project demands a conversation that cannot be unduly hurried, since diverse scholars must get used to unfamiliar insights from other points of view before a true synthesis can emerge. Such work can be richly rewarding. I know that Michael Welker has more to say about this.

Michael Welker

Eschatology, Anthropology, and Concepts of Law

My academic background is in the areas of theology and philosophy. I did post-doctoral work on Alfred North Whitehead¹ and thus got involved in the dialogue with natural scientists. Whitehead was a mathematician and amateur scientist and provided stimulating interdisciplinary insights. One of his basic interests was the complexity of cultural evolution. He acknowledged the fact that in modernity cultures center very much on mathematized science, and, to be sure, as a mathematician, he was in favor of this development. However, he observed that it comes with a price. He saw the danger that a culture strongly focused on mathematized sciences lowers or even distorts sensitivities for religious, ethical and aesthetic dynamics. He argued that a vibrant culture has to balance these various dimensions and strive for their mutual strengthening.

I found this perspective quite convincing. With this background in mind today, I should like to speak first about the relevance of creating different specific forms and formats in the organization of interdisciplinary research and dialogue. I will then pick up on three topics already mentioned by John Polkinghorne, topics that were successful in the interdisciplinary science and religion dialogue.

1. The relevance of specific forms and contents in the organization of research and dialogue

The *John Templeton Foundation* has in many ways been creative and innovative in supporting the science and religion discourse. It has supported a range of forms and formats of academic cooperation and interaction. I should first like to highlight my appreciation for research formats that Dr. Mary Ann Meyers has cultivated in the framework of *The Humble Approach Initiative*. These were

1 Michael Welker, *Universalität Gottes und Relativität der Welt. Theologische Kosmologie im Dialog mit dem amerikanischen Prozeßdenken nach Whitehead*, Neukirchen-Vluyn: Neukirchener Verlag, 2nd edition 1988; idem, "A.N. Whitehead's Basic Philosophical Problem: The Development of a Relativistic Cosmology," in: *Process Studies* 16 (1987), 1-25.

one-shot or two-shot events leading to a book publication. In each case a highly relevant topic was chosen, and a group of scholars with expertise in this topic was invited. Interest in the dialogue as such was not a criterion sufficient for their electability. "Are you merely interested in everything – or also in something specific?" This ironic question is attributed to Samuel Beckett. Over against this attitude, Dr. Meyers, in her projects in *The Humble Approach Initiative*, always made sure that the academic cooperation focused on a *specific topic*. The work on this topic then either supplemented previous research or stimulated the preparation of subsequent future research. Several Templeton-sponsored projects organized by Ted Peters and Robert Russell from the CTNS in Berkeley operated in a similar way. Two projects may suffice as examples: 1. *Kenotic Love*, a project organized by Mary Ann Meyers and John Polkinghorne, a preparatory consultation in the area of anthropology and love; 2. *The Resurrection*, organized by Ted Peters, Robert Russell and myself, a conference supplementing earlier work on eschatology.²

Another great strength of the Foundation is its willingness to support projects at new frontiers of cooperation and even at risky frontiers of dialogue. In the framework of the *Humble Approach Initiative*, we organized a dialogue with Greek and Russian Orthodox theologians and scientists³ on the work of the Spirit in creation and new creation. We also had a dialogue with the first generation of Pentecostal theologians interested in academic discourse and in the engagement between science and theology.⁴ This was innovative but not easy because we could not rely on established models and exemplary experiences, recognized publications and proven styles of thought. In the same vein, greatly supported by Dr. Paul Wason and his team, we initiated a project entitled *Law and Love: The Science and Theology Dialogue in China and the West*.⁵

2 John Polkinghorne (ed.), *The Work of Love: Creation as Kenosis*, Grand Rapids and London: Eerdmans and SPCK, 2001, 127–136; Ted Peters / Robert Russell / Michael Welker (eds.), *Resurrection: Theological and Scientific Assessments*, Grand Rapids: Eerdmans, 2002.

3 Michael Welker (ed.), *The Spirit in Creation and New Creation: Science and Theology in Western and Orthodox Realms*, Grand Rapids u. Cambridge/UK: Eerdmans, 2012 (Russian translation by Sergii Bortnyk, Moscow: St. Tikhon Orthodox University Press, 2013).

4 Michael Welker (ed.), *The Work of the Spirit: Pneumatology and Pentecostalism*, Grand Rapids: Eerdmans, 2006.

5 Michael Welker et al. (ed.), forthcoming 2014 in English and Chinese.

2. Three topics that proved successful in the dialogue between science and theology

In terms of topics, three areas within my expertise have been particularly successful as foci of engagement between science and theology respectively science and religion.

a. Eschatology

John Polkinghorne and I organized a multi-year research project at the CTI in Princeton that resulted in a very successful publication titled *The End of the World and the Ends of God: Science and Theology on Eschatology*.⁶ A crucial point of insight was that the spiritual eschatological realities have to stand *in continuity as well as in discontinuity with our real experiences*. Eschatological realities are not fantasies. This is quite obvious in the biblical symbol systems that always emphasize both aspects, the discontinuity and the continuity of earthly and eschatological realities. "New creation, new heaven and new earth" – i.e., discontinuity; but then: "New creation, new heaven and new earth" – continuity. "Flesh and blood will *not* inherit the reign of God" – discontinuity; "We believe in the resurrection of the body" – continuity. This constellation, we found, leads to fascinating processes of discovery, processes that are not mere invention. In describing these processes of discovery, we developed clear concepts and strategies of *truth-seeking communities*, in both the sciences and theology.

The contents of these processes of discovery and the search for truth are not at all simple issues. For religions deal with gigantic problems and not, as is often believed, with just cozy private experiences. Think of the historical backgrounds and the developmental logics of the biblical canon. Here, religious experience and religious thought always unfold under the pressure of a global power: Egypt,

6 John Polkinghorne and Michael Welker (eds.), Harrisburg: Trinity, 2000; second printing 2000 (Korean translation by Joon Ho Shin, Seoul: The Christian Literature Society of Korea, 2002; Chinese translation by Wang Tao, *Logos and Pneuma Translation Series 16*, Hong Kong: Institute of Sino-Christian Studies, 2010). The gain of methodological insights was reflected in a consultation documented in "Opening Windows Unto Reality" (Polkinghorne) and "Springing Cultural Traps: The Science-and-Theology Discourse on Eschatology and the Common Good" (Welker), in: *Theology Today* 58 (2001), 165–176; and in John Polkinghorne and Michael Welker, *Faith in the Living God: A Dialogue*, London and Philadelphia: SPCK and Fortress, 2001 (German translation 2005; Chinese translation 2006).

Assur, Babel, the Persians, the Greeks and the Romans. The global power, in its overwhelming presence, puts the traditional religious, legal and moral norms under extreme stress: "Our traditions and institutions, as we see and have experienced them so far, do not help us in this situation!" Then there is a search for new insight, followed by the discovery that spiritual powers, soft, emergent powers, seemingly frail, like wisdom and love, the coming reign of God, and the spiritual body of the resurrection, are revealed as creative and saving realities. To be sure, they are complicated realities, but realities that can be explored in truth-seeking communities. One of the central notions we are still wrestling with is the notion of the "spiritual body." The ancient cultures were well aware that our bodies are loaded with and shaped by mind and spirit. They also conceived of the reverse impact, e.g., spiritual realities shaped by bodily realities. In this context, it is crucial to acknowledge the complicated interference of natural, social, cultural and religious dynamics and processes.

b. Anthropology

The second most important area of research in the science and theology discourse, already mentioned by John Polkinghorne, was and still is the area of *anthropology*. The John Templeton Foundation generously supported our projects and agreed to fund more than one or two meetings so that we could develop a fruitful multidimensional approach toward the human person. The fact is that in order to have an impact on each other and potentially change the participants' ways of thinking, more than one or two conferences are needed. In projects that we conducted at the CTI in Princeton, and with Professor William Schweiker at the University of Chicago, supported by the Lilly Foundation, we had had good experiences with sequences of four or five meetings in the course of several years. For the first meeting, we invited short and often programmatic papers of only three to five pages. These first meetings of competent scholars from various disciplines and different countries always generated at least mild enthusiasm and great anticipation. For the second meeting, we asked half of the participants to elaborate their contributions, and the others were asked to prepare responses.

As a rule, these second meetings became what I have termed "Tower of Babel meetings." The participants had to go through the experience of clashes of rationalities, methods and procedures of research. Quite often we heard the phrase: "I do not belong to this group! I cannot contribute to further progress." The confusion and even despair generated threatened the continuation of the projects, but that was only one part of the danger. The other part was the danger

of "great proposals of dominant minds," e.g., "If we all thought as I suggest we do ...;" "If you all followed these ideas, these methods, then we could succeed in ..." If as organizer of the project one does not want to lose a number of the bright and subtle minds, one has, against such proposals, to look for the small bridges among some of the contributions. In this phase, the balancing of complexity and the search for coherence is crucial.

The third meeting then not only brought the elaboration of the second half of the contributions and the responses of the rest of the group. (At this stage, we sometimes included additional contributions on topics, methods and strategies of research left out earlier.) The third meeting as a rule brings a significant rise in progress with regard to interweaving, consistency and coherence. The fourth meeting sees a continued growth and gain in profile. It also serves to prepare the book publication. In some cases, a fifth meeting was needed for this preparation.

In the case of anthropology, we wanted to question dualistic anthropologies or anthropologies based on dualities such as "mind and body," "spirit and body," "brain and spirit," etc. We wanted to overcome the mentalist approaches that dominated the 1960s and -70s, and often just focused on "consciousness and self-consciousness;" we also wanted to overcome more recent naturalistic and scientific anthropologies that were just fixated on the brain or the genome. The question was how the body can be included in anthropological explorations without then dropping into naturalism and reductionistic scientific approaches. Soon it became clear that the appeal to the "complexity of the human person" over against a dualism was not helpful. A philosopher warned us that such an approach was a bottomless pit: "We do not know how to rank about twenty current concepts of the human person!"

With the help of biblical scholars and a new appreciation for Pauline anthropology, we explored the interesting spectrum of *flesh - body - heart - soul - conscience - reason - spirit* and developed a multidimensional anthropology, an approach that allowed the different disciplines and fields to bring in and connect their specific insights.⁷ We were able to work with a new spreadsheet in anthropology, a spreadsheet that enabled us to differentiate flesh and body, to explore the complexities of the heart and the complexities of conscience, to differentiate and fruitfully relate spirit and reason, and to offer inspirations in the current wrestling with questions of embodied cognition, memory theories and evolutionary anthropology.

7 Cf. Michael Welker (ed.), *The Depth of the Human Person: A Multidisciplinary Approach*, Grand Rapids: Eerdmans, 2014.

c. Concepts of Law in the Sciences, Legal Studies and Theology

The third area of research that proved successful in the interdisciplinary dialogue was “*Concepts of Law in the Sciences, Legal Studies and Theology*.”⁸ This was the most complicated dialogue so far, because we had to bring the different rationalities and modes of thought of scholars of law and the history of law into the orbit we had earlier established in projects between the science and religion respectively the science and theology groups. The encounter among these different fields, however, enabled us to gain deep and subtle insights into the character of the laws of nature and into commonalities and differences in the approaches in chemistry, biology and physics. We were able to explore complicated relations between laws of nature and natural law traditions. We asked, “What can the laws of nature teach us about moral laws?” “How should we deal with tensions between a deep and growing moral skepticism in some parts of the world and continued trust in the natural law and in morals based on it in other religious and cultural traditions?” In a famous dialogue with Jürgen Habermas some years ago, Joseph Cardinal Ratzinger maintained that the “instrument of natural law has become blunt.” We made several preparatory steps to replace this “blunt instrument” by our insights gained in the science and theology dialogue, enriched by those of legal scholarship.

Denis R. Alexander

The Faraday Institute for Science and Religion – the First Seven Years

The Faraday Institute for Science and Religion started its activities in January 2006 based at St. Edmund’s College, a graduate College of the University of Cambridge. The University comprises 31 colleges in all, each of which is completely interdisciplinary. A Cambridge college therefore provides a natural location for an enterprise which aims to bridge the discourses of many different academic disciplines.

Funding for the initial research and dissemination projects of the Institute was generously provided in the form of a 30-month grant from the John Templeton Foundation, together with matching funds. The generation of matching funds, together with other grants and income from a wide range of more than fifteen different trusts and donors, including the Templeton World Charity Foundation, then secured the work of the Institute to the present day. ‘Friends of the Faraday’ provide an invaluable support and donor group. Faraday Associates are those in the academic community, ranging from PhD students to Vice-Chancellors, who help provide an important linkage between the Institute and various academic disciplines.

The purpose of this chapter is to illustrate the way in which an Institute of science and religion can flourish within the framework of a historic university such as Cambridge. There are of course many different ways in which an Institute of this kind might exist within a university; the present chapter describes one particular model which may hopefully spark ideas for others.

The Faraday Institute is an integral part of St. Edmund’s College and has no separate legal existence outside of the College which is regulated by its Governing Body, consisting of the Fellows of the College. The Fellows were kind enough to vote, in 2005, that the Institute become part of the College, established by its own separate College ordinance. The Institute receives no funding from the College, but instead pays the College for its valued practical support, including office rental, personnel, IT and financial services. Overall responsibility for the running of the Institute is in the hands of the Master and Fellows of the College.

From its beginning, the ethos of the Institute has been created by scientists, but in such a way that is open to all other disciplines, so that staff over the first seven years have been recruited from a very wide range of disciplinary backgrounds in

8 Michael Welker and Gregor Etzel Müller (eds.), Tübingen: Mohr Siebeck, 2013.