

Michael HELLER, *Creative tension. Essays on science and religion*,
Templeton Foundation Press 2003, pp. 183, paperback / ISBN 1-932031-34-0;
\$22.95.

This is the second book by Michael Heller which presents to English readers his previously written papers on science and theology. The first one, *The New Physics and a New Theology* (Vatican Observatory Publications 1996) is worth mentioning in this context because in it, Michael Heller proposes a new direction in theology – the theology of science.

The theology of science as envisioned by Heller is defined as an authentic theological reflection on the existence, foundations, methods, and results of modern science. Its purpose is to break down the mutual lack of trust between science and theology and to help theology advance to a new stage, where it can participate creatively in the currents of modern thought. Philosophers of science examine the boundaries of natural science and what can be known by the methods of science alone. Theology extends beyond these boundaries to include the supernatural, although Heller is far from embracing any kind of dualism. His way of extending these boundaries is different. A good example is provided by Einstein's famous question, „Why is the world comprehensible?” Neither Einstein nor any other philosopher or scientist is able to answer this question. It is theology that has to take over and seek the answer to Einstein's question. Heller provides more similar issues. All of them are rooted in the idea of creation. The primary requirement for the success of Heller's proposed branch of theology is a „theologically correct and thoroughly modern concept of creation” (p. 101). Many would agree with Heller that his proposal for a new field of theology to accomplish the task seems well argued, but in the book one finds little in terms of a precise description of the project. Moreover, Heller is essentially concerned with other themes (e.g. the historical relationship between science and theology, and the implications of positivism's demise on the future of this relationship) related to the main project but not aiming at its development.

What is lacking in *The New Physics and a New Theology* one can find in the book under review. *Creative Tension* is also a collection of papers – or more specifically notes, as Heller puts it in the Preface – but among these papers one finds real treasures which bring about some support to the project briefly announced in the first book. *Creative Tension* is divided into four parts. The first two parts propose the ideas already mentioned, namely some methodological issues concerning the relationship between science and theology in regard to modern cosmology, and the program for a „theology of science”. In addition, they raise some historical themes such as the evolution of the matter concept or the development of ideas about the place of man in the universe, etc. Part Three contains some seminal ideas about the problem of „creation and science”. As we

recall these were some of the main topics of a new branch of theology and we will turn to it in a moment. Part Four „looks at the vestiges of Transcendence in some key issues of contemporary science and methods it employs in investigating the world” (p. xii).

This brief enumeration of topics makes clear that the papers which try to develop the program for a theology of science are in Part Three and, to some extent, in Part Four. My favorite is Chapter 10, in which Michael Heller deals with the evolution of concepts. Borrowing from his own research in cosmology, Heller traces the changes of fundamental concepts such as temporality, causation and dynamics, determinism, law and chance. As is well known, the main goal of current research in theoretical physics is to unify quantum mechanics with general relativity. Heller thinks that the recently elaborated noncommutative geometry offers fruitful possibilities in this direction. In a series of scientific papers published in the 90s and recently he presented a working model of the sought unification. „The main idea of the new approach is to suppose that the physics ruling the Universe is based on a noncommutative geometry and that on this level there is no distinction between physical processes and the (spatio-temporal) stage on which they develop. [...] Only when we go from the fundamental level to the upper layers of the world’s structure does the distinction between the spatio-temporal arena (governed by the ordinary commutative geometry) and physical processes emerge” (p. 111). Now, from a philosophical point of view, it is very insightful to notice what happens to these well-defined concepts during the transition from one level to the other, more general one. For the concepts, as Heller emphasizes, evolve during the process of generalization. He follows the „various adventures” of concepts such as causality, probability, chance and purpose, looking closely at their „non-commutative counterparts”, as they emerge from the process of generalization. The results are significant. Causation „in a totally global setting” loses its connection to the spatio-temporal order (space-time in general relativity has a causal structure which determines the propagation of physical signals) and becomes incorporated into the noncommutative dynamics of the new model. The character of noncommutative causation is atemporal and nonlocal, and yet it preserves the original sense of causation, being a legitimate generalization of the causal structure of space-time in general relativity. This has theological consequences which are quite independent of the future fate of the noncommutative model itself. Heller’s theological conclusions are best read as conditionals. If in the domain of physics it is possible to contemplate such a radical change in the meaning of key concepts, what can one expect in the domain of theology? Heller does not urge theologians to generalize theological concepts. After all, the examples he presents are meaningful only within the mathematical context. However, he thinks that the very idea of concept generalization in science falsifies certain hasty theological conclusions, such as the thesis that in the context of modern science it is impossible to hold to the idea of a timeless God. He reaches the same general conclusion while analyzing other mentioned examples. I will not go into them now; in the final section of my review I would like to justify the title of the book, *Creative Tension*, which aptly captures one of the main ideas of Heller’s thought.

In the Catholic tradition of theology (as well as other traditions) there is a popular way of solving the problem of the conflict between science and theology. It is called separation, or the theory of two levels. It says that scientific knowledge and theological knowledge are located on two different methodological, epistemological and linguistic levels „which do not intersect one another and which cannot be translated from one another”. Heller does not accept this easy solution. He obviously accepts many differences that distinguish one from the other, but he thinks that they are intrinsically related.

When the author of the fourth Gospel, St. John, writing about Logos, said in the famous words of the Prologue: „The Word became flesh”, he expressed not only the truth of faith, but also hinted at the essence of the relation between reason and faith. God (Inconceivable, Totally Other) reveals himself to men through words and deeds. He does it by means adapted to human comprehension. God’s revelation was recorded in definite everyday language, which *implicitly* included the existing knowledge of its users. The moment when God’s message took on the form of human language marks the origin of future tensions and conflicts. If we agree on the fact that the revelation included in the Holy Scriptures brings about the first theological reflection, it is easy for us to accept the conclusion that „the origins of the conflict are found in the essence of theology itself”. In this sense, the essential tensions between science and theology – as M. Heller stresses – are irremovable. „They are irremovable, for in the theological discourse, the lack of proportion between the words and their meanings and what is to be expressed, will always be present. And not only the lack of proportion between words and contents. Content itself is beyond our abilities to comprehend. This tension – although it is not easy for our reason – cannot be removed. Authenticity of belief requires this tension to be constantly alive in us”¹.

Now, this tension is „creative”, because it disposes those who understand it to engage in the project of the theology of science. It certainly helps them to understand past tensions; it enables them to avoid new ones. Trying to reach beyond the primordial source of possible conflicts and vital relations, Heller tries to name some secondary sources of the difficult coexistence of science and theology. In his view,² one of the most important things was the institutionalization of Church teaching that significantly contributed to the establishment of the thesis of separation. „By institutionalization I mean not only a subordination of philosophy and theology to Church authorities, but also what may be called an ‘invisible college’ [...] that is, ways of thinking elaborated by long tradition, a balancing of influences among different schools and systems, consolidated methods of collecting and transmitting information, unwritten codes of behavior for people involved in the ways of knowing. The sciences were born in an entirely new situation no longer controlled by Church authorities. From the very beginning they started to create their own ‘invisible college’. Conflicts were unavoidable” (p. 52).

¹ M. Heller, *Is Physics an Art?* (Tarnów: Biblos, 1998), 141, in Polish.

² See also: O. Pedersen, *Conflict or Symbiosis?* (Tarnów: Biblos / OBI, 1997), chap. 1 and 2, in Polish.

Citations give us an idea of the meaning of „creative” in the title of Heller’s book. The primary source of the tension between science and theology is irremovable, but the one who understands its *rationale* can engage in a fruitful dialogue meant to understand and remove some of the most impertinent secondary sources of tension. In this sense, Michael Heller’s book is a thoughtful contribution to the science-theology dialogue. It is written in a way accessible to a variety of readers, from the College student to the professional researcher in the field. It contains, as I mentioned, some seminal ideas, but also a lot of suggestions for further research by both historians of science and theology, and philosophers. Templeton Press edited it with care (the only thing I noted is the lack of numbering of subsections) and I certainly recommend it to all those interested in the science-theology relationship.

Stanisław WSZOLEK

Edith – Stein – Jahrbuch, Echter Verlag, Würzburg 2004, ss. 261.

Ukazał się kolejny, X tom *Rocznika Edyty Stein*. Trzeba o tym napisać nie tylko ze względu na jego zawartość. Z wydaniem tego jubileuszowego numeru został zamknięty okres, w którym redakcja *Rocznika* spoczywała w rękach J. S. de Murillo. Nowym naczelnym redaktorem jest od tego numeru Ul. Dobhan.

W roku 1993 ukazał się I. tom *Rocznika Edyty Stein*, którego redakcję na zlecenie Zakonu Karmelitańskiego objął hiszpański karmelita J. S. de Murillo. *Rocznik* miał stanowić swego rodzaju „otwarte forum” dla współpracy między filozofią i teologią, jak również pedagogiką i sztuką, nawiązujących do myśli i ducha Edyty Stein. Koncepcja *Rocznika* szła – jeśli można tak powiedzieć – „w szerokość”, tak, aby próbować wgłębiać się w myśli Edyty Stein aż po granice możliwości. Ale co to właściwie znaczy? Czy na końcu takiego eksperymentu myślowego będziemy jeszcze mieć do czynienia z myślą Edyty Stein? Odpowiedzi na te istotne pytania i zamyślenia nad kształtem *Rocznika* doprowadziły do zmiany jego kierownictwa i tym samym do zmiany jego koncepcji.

J. S. de Murillo – założyciel i kierownik Instytutu Edyty Stein w Monachium razem z M. Thurnerem z Instytutu Filozofii Chrześcijańskiej przy Uniwersytecie w Monachium powołali do życia nowy Rocznik: *Aufgang. Jahrbuch für Denken, Dichten, Musik*. Jego zadaniem jest przybliżenie szerszym kręgom czytelników tzw. fenomenologii głębi (Tiefenphänomenologie), której źródłem jest – według de Murillo – doświadczenie cierpienia, tak własnego jak i całych narodów. Tego doświadczenia nie można opisać w sposób racjonalny. Istotny wkład do jego ujęcia wnoszą sztuka, konkretnie: poezja i muzyka.

Filozofia Zachodu zatrzymała się – według de Murillo – na powierzchwności bycia, ona nie wchodzi w jego głębię, chociaż wie o jej istnieniu. Przez powierzchwność bycia rozumie de Murillo „panowanie panowania”, te wszystkie sytuacje, w których daje znać o sobie moc i siła. Głębia jest – tak jak powierzchnia – prapodstawą bycia. One są względem siebie diametralnie przeciwne, ale w swoim przeciwieństwie siebie dopełniające. Głębia i powierzchnia są biegunami bycia, podobnie jak elementy męski i żeński, których zjednoczenie prowadzi do po-