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From the Editor

With Iasi now an exciting but receding memory, and Sigtuna still a distant prospect, this issue of ESSSAT News takes the opportunity to carry three articles of different types from any that have appeared recently.

First, I am delighted to share this page with our new Secretary, who writes a little about herself to members she has yet to meet.

Then come two pieces about enterprises in countries outside the NW European block of science/theology activity. First, a senior Spanish member, Prof Javier Leach, writes about a new development in Madrid. He is followed by our Estonian Council colleague, Dr Anne Kull, telling us of a parallel, and comparably impressive development in Tartu. More such articles will always be welcome. However, any member interested in contributing should please discuss both date and length with me by e-mail before starting to write.

There is also, of course, our usual quota of book reviews, three of the volumes here being by notable ESSSAT members – LeRon Shults, Sjoerd Bonting and Wentzel van Huyssteen. The latter’s theme being also a special interest of my own, I have indulged myself by writing an Essay-review – a form for which there hasn’t been space for some time. The remaining reviews, however, are no less significant.

Finally, readers of the News in hard-copy will find that the pagination style has changed – this is now p. 3, not p. 1. What they haven’t known is that, since we went over to coloured covers, those receiving the electronic edition either had different pagination or got the cover as a separate attachment. Now, thanks to a tutorial from our webmaster Andrew Harding, everyone is treated equally again!

Deadline for next issue

Material to appear in the Christmas issue (16.4) must reach me by Monday, Dec 4.

Neil Spurway

The new Secretary introduces herself

I live in Aarhus, Denmark, with my husband Søren, and am currently a Ph.D. student at the Theological Faculty at Aarhus University. I have worked within the field of Science and Theology since the beginning of my theological studies. Most of these have been in Aarhus with Professor Niels Henrik Gregersen, but I have also spent a year in Chicago, studying with Professor Phillip Hefner at the Zygon Center, as well as one semester at Princeton Theological Seminary under Professor Wentzel van Huyssteen. Here in Aarhus I am on the board of the Danish Science Theology Forum, which celebrated its 25th year of interdisciplinary lecture series and publications in 2005.

My main research interests concern the understanding of human nature in various disciplines and my master’s thesis, ‘Aggression and Violence as a Theme for the Christian Doctrine of Sin’, was awarded the ESSSAT Student Prize, 2004.

This award gave me the opportunity to participate in the ECST X (Barcelona, 2004) where for the first time I met the ESSSAT community. The conference not only offered many great opportunities to discuss the research done by people in the field. It also offered an atmosphere of community among the participants and the people responsible for planning the conferences and all the other ESSSAT activities. I left Barcelona feeling very happy about all the colleagues and friends I had made there. So when, some time later, I was offered the position of ESSSAT Secretary, I was very honoured and glad to accept, which means that I can continue to broaden my involvement with ESSSAT and its members. I hope I can live up to Eva-Lotta’s competent and devoted standards as ESSSAT Secretary throughout my own years in the post.

I have already met many of you in Iasi at the ECST XI and I look forward to meeting you as well as other members of ESSSAT at the ECST XII (Sigtuna, Sweden, 2008). See you then!

Marie Verdrup Nielsen
Local Initiatives

THE INSTITUTE FOR SCIENCE TECHNOLOGY AND RELIGION
University of Comillas, Madrid

The Institute ‘Cátedra Ciencia, Tecnología y Religión’ was founded in 2004 by a group of professors, scientists, and Jesuits engaged in such disciplines as Physics, Biology, Mathematics and Cognitive Psychology. It seeks to respond to the international movement of reflection on science and religion, and we should thank the Metanexus Institute and the Templeton Foundation for their example and encouragement.

Our Institute’s objective is to create among scientists and engineers – staff and students – a forum for reflection which encourages them to relate science and technology with philosophy, world visions, Christian theology, and religions in general. We want to promote discussions, research and publications related to science and religion and have created a webpage to facilitate these (www.upcomillas.es/catedras/ctr).

The fundamental activity organized during our first two academic years has been a Seminar series at which more than 25 academics, including some of the most eminent professors in Spain, have spoken. Live audiences, typically around 150, have been made up of staff, students and alumni of our university, plus members of the public. But the Seminar has also has been followed up, in other universities and elsewhere, through our webpage. Thus the activities of the Institute are being increasingly recognized, within our University and in other areas of Spanish culture.

Future plans, of course involve continuation of our current seminars and conferences, and research projects already begun. Three doctoral dissertations are in hand, as are other scientific publications. We also have more ambitious projects, for which financing is being worked out. One of the projects is called “Sophia-Iberia.” Approaches have been made to over 100 Latin-American universities, with view to mutual support in science and religion studies, and we have received more than 50 positive responses from groups wishing to participate actively in promoting the science-religion dialogue. We intend to intensify these contacts, and also promote the formation of local societies in Latin-American universities.

We are aware that a stable and serious work/research structure cannot be created in 1-2 years. We shall need patience and perseverance in the task undertaken.

Serious research in philosophy and theology, especially from a Catholic theological perspective, has long been active in Spain. However, with very few exceptions, the science-religion dialogue as it is currently conceived in Anglo-American countries was not pursued in Spain until very recently. Thus, promotion of science-religion studies, such as Professor Manuel García Doncel, organizer of the 2004 ESSSAT Conference in Barcelona, has done for some years in that city, as Professor Mariano Artigas does in Navarra, and as we have done more recently by creating our Institute, can help fill a gap in Spanish culture, both at home and in Latin America.

For theology, the dialogue with science is very important. Theology has always been an exposition of the meaning of Christianity, but this exposition cannot be attempted without presupposing some philosophical outlook on human experience. Today it is science which offers the fundamental reference and perspective (about the universe, life, and human kind) on which to base an intelligible exposition of Christianity. Thus, the importance of the science-religion dialogue consists in the following: Through it should be born the modern theology of science which we need today. This modern theology should promote the confluence of religions and, at the same time, illuminate modern culture. In this sense, although the strictly scientific method is independent of philosophy, metaphysics, or religion, the same science will find in this modern theology an unquestionable illumination concerning the ultimate meaning of the universe and human life.

Javier Leach Albert
Director
THE COLLEGIUM OF SCIENCE AND RELIGION
University of Tartu, Estonia

This Collegium was formally founded at the beginning of 2002. However, initial discussions had already resulted in an international conference on *The Human Being at the Intersection of Science, Religion and Medicine* in the previous year. Keynote speakers were Profs Philip Hefner and Antje Jackelén, while several participants were from the University of Helsinki, Finland. Conference papers were published under the same title by the University of Tartu Publishing House in 2001. Among the ‘founding fathers’ were Kalevi Kull, Kalev Tarkpea, Jaak Järv, Tõnu Lehtsaar, Jaanus Noormägi, Andres Soosaar, Karl Pajusalu, Jaan Ross, Heiki Valk, Toomas Jürgenstein, Ken Kalling. Later Erki Tammiksaar, Meelis Friedenthal, Roland Karo, Ain Riistan and Enn Kasak have been involved actively. The disciplines represented are from astrophysics to archeology and musicology-and-medicine to (of course!) theology.

From 2004 till now the Collegium has been a recipient of a three-year grant from the Metanexus Institute Local Societies Initiative program. Local supporters have been the Ministry of Science and Education and the Council of Estonian Churches, but especially the faculty of Theology at the University. The Collegium has for its members academicians, professors, doctoral and a few master level students. The goal is not to increase membership numbers, however, but rather to facilitate inter- and transdisciplinary research, to connect people and ideas, to prompt and sustain dialogue within the university and with the society. The members of the Collegium are all connected with the university but some of the events are meant for the gymnasium-students, e.g. an annual essay contest on science and religion. The essay contest traditionally ends with a common festive dinner with the members of the Collegium.

The Collegium organizes elective courses for the university and general public. One of these is *Medicine and Religion*, with about 300-400 people attending. Another such course is on *Origins and Ends*. Every week expert talks about cosmology, biology, anthropology, biosemiotics, Old Testament and ANE studies, world religions, theology, medicine, law etc. Every other week there are also free movie presentations, alternatively knowledge-based movies and meaning-searching, artistic-emotional movies (i.e. left and right hemisphere movies!), introduced by an expert. Here again 300-400 people, many of them students, make up the audience.

Last Fall a new kind of course/public lecture series on science and religion was held. It was called *A Short History of the Religion Called Science* and the lecturer was Prof Enn Kasak (astrophysics and philosophy, University of Tallinn). This new cooperation with the University of Tallinn led to an interdisciplinary conference there in February 2006 on *God in Science*. The presenters were various scientists and theologians including Archbishop Andres Põder of the Estonian Evangelical Lutheran Church, Prof Kasak, and colleagues whose fields ranged from linguistics to chemistry, from theology to cybernetics. The conference received wide media attention and the papers will be published as a book.

Membership of the Collegium has led people to a logical next step: attending ESSSAT conferences and joining this international society. And the annual spring schools of the collegium (two-day seminars, held outside the university), and elective courses for the whole university and general public, have already become a little tradition within the university. Among the objectives of the Collegium, beyond the goals already mentioned, have been to promote awareness in the churches and congregations of the subtle but pervasive changes in the views of life of their constituencies; to gain visibility, reliability and trust for the department of theology and its activities among the other departments in the University of Tartu and nationally in academic circles; to familiarize scholars and students of medicine, natural sciences and humanities with ideas and models of theology and religious studies; and to plan, and find means for, advanced interdisciplinary studies of the implications of the full range of the modern scientific world-view for the interpretation of religion(s).

Anne Kull
Conferences of various bodies

RELIGION, SCIENCE, AND PUBLIC CONCERN
Discourses on Ethics, Ecology, and Genomics
Leiden, Netherlands
26 & 27 October, 2006

Main speakers:
Bronislaw Szerszynski
Hans Achterhuis
Gerrit de Kruijf
Hub Zwart
Jan Boersema

This conference, organized by the Faculty of Theology, Leiden University, aims to bring together those interested in interactions between religion, ethics, and science in public discourses. Reflecting upon the social and moral jobs that speakers expect religious, ethical, and scientific notions to do, we may acquire a better understanding of debates on public policy and the role of and the relations between religion, ethics, science, politics, and technology.

The conference is intended for scholars, scientists, politicians, policymakers and other interested parties. In plenary sessions and workshops participants will discuss several issues regarding religion, science, ethics, ecology, and genomics.

Organizers: Willem B. Drees, Olga Crapels, Tony Watling, Taede Smedes


Address:
University of Leiden
Faculty of Theology
Prof. Dr. W. B. Drees
Postbus 9515
2300 RA Leiden
The Netherlands

Website, for provisional program, more information and registration:
www.rspc-conference.nl

ALBERT EINSTEIN AND RELIGION
Bad Urach, Germany
27-29 October, 2006

Main speakers (in German):
Albrecht Beutelspacher
Dirk Evers
Holger Lyre
Wolfgang Achtner
J Schneider/J Hübner

Albert Einstein Zählt zu den prägendsten Wissenschaftlichen des 20 Jahrhunderts. Dazu trugen aber nicht nur seine wissenschaftlichen Arbeiten bei, die er praktisch im Alleingang geleistet hat, sondern gerade auch seine Personlichkeit.


Organizers: Jürgen Schneider, Günter M. Schütz

Address:
Karl-Heim-Gesellschaft
Reuchweindamm 17
13627 Berlin
Germany

Tel: 030 / 33 62 557

E-mail: info@ karl-heim-gesellschaft.de

Website:
www.karl-heim-gesellschaft.de
CHALLENGES & LIMITATIONS OF MODELS IN SCIENCE & THEOLOGY

Bonn, Germany
20–22 April, 2007

This will be the second local research conference jointly organized by ESSSAT and the Evangelische Akademie im Rheinland. In June 2005 there was a successful conference in Bonn, supported by the John Templeton Foundation. More than 50 participants, mainly young scientists from a wide range of disciplines, discussed their papers in workshops, introducing their actual research project or the methods through which they were approaching the science / theology dialogue. The outcome of this conference will be published soon.

The limitations of models, of theories and metaphors are widely discussed in the dialogue between science and theology. They will be the theme of the 2007 conference. The following two questions point to central topics of the debate:

1 Scientific models are able to deliver precise descriptions, but do they cover the entire reality?

2 Theological theories claim to give a complete description but how do we deal with the metaphorical language?

The conference will be held in German and English. If you are interested in participating, please send an email with some information about your research project and/or publications to:

Dr Frank Vogelsang, Evangelische Akademie im Rheinland,
frank.vogelsang@akademie.ekir.de,
or Dr Hubert Meisinger, Vice-President, European Society for the Study of Science and Theology
meisinger@esg-darmstadt.de,
or visit the homepage of the academy:
www.ev-akademie-rheinland.de
(Themen/Naturwissenschaften).

On this homepage you will find further information in the coming months, e.g. on conditions of participation, submission of papers and more.

SCIENCE & RELIGION: HISTORICAL & CONTEMPORARY PERSPECTIVES

Lancaster, UK
23–26 July, 2007

An international and interdisciplinary conference to mark the retirement of Professor John Hedley Brooke.

The conference will bring together leading historians, philosophers, and theologians to debate the latest research into science-religion relationships. Speakers include:

Keith Ward             John Hedley Brooke
Alister McGrath       Geoffrey Cantor
Wentzel v Huyssteen    Ronald Numbers
Fraser Watts           Frank Turner
John Lennox            Janet Browne
Sarah Coakley          Scott Mandlebrote
Niels Gregersen        Peter Bowler
Nancey Murphy          Nicolaas Rupke
S Conway Morris        Bernard Lightman
Willem Drees           Rob Iliffe
Robert Fox             Margaret Osler
Roger Smith            Martin Rudwick
David Knight           Stephen Pumfrey
Jan Golinski           Peter Harrison

There will be room for some further contributions, preferably under one of the following general headings:

- The Challenge of Modernity
- Natural Theology, Teleology, & Design
- Darwin & Evolution
- Sciences of Religion & Religions of Science
- Reconceptualising Science & Religion

To offer a paper, submit a title and 250-word abstract by 31 December 2006 to:
t.dixon@lancaster.ac.uk.

Conference website:
http://www.lancs.ac.uk/depts/history/news/science&religion.htm
**Book reviews**

**REFORMING THE DOCTRINE OF GOD**

*F. LeRon Shults*

ISBN 0-8028-2988-0 (pbk) $35.00, £19.99

It does not often happen that the reading of a book of theology becomes, as one proceeds, an increasingly fascinating, indeed breathtaking experience. Yet this is what may happen when you read this book – a work that forms, as the author indicates (p. 294-297), part of a larger project of which one of the previous volumes was reviewed in ESSSAT News 13.4. But, standing alone, this book is itself a masterpiece of intellectual architecture, which is one of the factors that contribute to the extraordinary experience of reading it.

LeRon Shults starts from the assumption that the doctrine of God needs to be reformulated – and that the time has come to take up that challenge. For this he adduces three reasons:

Firstly this reformulation is needed because we are charged with continually reforming our theological concepts. If we don’t, the resulting calcification of our theological imaginations will cripple our spiritual lives.

This argument (pp. 2-4) exhibits one of the most striking features of the author’s style of reasoning, namely the easy transition from ‘objectified’ theological reflection to existential illumination. For he explains that a reformulation of the doctrine of God implies that this doctrine will, in the process of revision, also reform us.

A second point is that the traditional doctrine of God as a single superhuman subject that is the cause of everything and exists in eternity has become alienated from the spiritual needs of believers because it employs old metaphysical categories which are no longer understood.

Finally Shults asserts that the traditional concept of God has been subjected to such compelling criticism from philosophy and the sciences, that it has been definitely refuted and become theoretically untenable.

For these reasons the doctrine of God must undergo a radical reformulation, and the impulses of late modern philosophical and scientific developments in different areas can give us clues as to how that reformulation should be performed. It is one of the most fascinating features of the book that it provides many concrete examples of the new situation and draws them together into a coherent whole.

The general tendency in philosophical reflection and scientific progress can be called, according to the author, a “turn to relationality”. By this is meant that a metaphysics starting with single substances is being increasingly replaced by a view of reality giving precedence to relations and interactions, i.e. dynamic instead of static conceptions. This development has spilled over into psychology and anthropology, insofar as persons are considered less as single subjects than as embedded in social contexts and constituted through their relations. Shults proposes to apply these ideas to the doctrine of God by not considering God as a single substance any more but as a being in relations.

But his objective is not simply to revise the doctrine of God as such. The reformulation is also meant to accomplish a more demanding task, the task of retrieving theology itself – of making theology available to itself again. For, in his view, theology should not be done primarily by means of objectified, “distanced” reflection and conceptualization but by recovering the very experience of the living, relating God, i.e. by opening up spaces for the experience of God’s loving presence. He sees current circumstances as particularly favorable for such a reorientation of theology because diverse trends towards dynamic, relational understandings of reality have converged into one coherent picture.

As I noted earlier, one of the author’s significant achievements is easy, unforced transition from the presentation of “objectified” facts and theories to the expression of the experience of faith. For the sake of this he diligently formulates and reformulates his ideas, advancing step by step from summaries of scientific discoveries or philosophical theories to the expression of a spiritual experience and an existential attitude. This happens especially in the third, reconstructive section of his treatise, where the argument becomes at times a staggering and stumbling “process”, moving forward dialectically and in many repetitions towards its ambitious goal. These paragraphs give the impression of being more an attempt at “picturing in language” the experience of divine presence than being an “objectified” presentation of a coherent, constructive argument. One senses that the
author is here up to something important, that he is touching upon one of the central mysteries of Christian faith. Descriptive, objectified language turns into an existential, evocative "dialectic", expressive of the reformulation that theology itself is undergoing in this process. It is one of the fascinating achievements that, in spite of the dialectical and poetic character of these paragraphs, no break can be sensed between them and the passages summarizing scientific or philosophical developments conducive to the proposed reformulation.

The book is carefully built up. Apart from the introduction and a short epilogue it consists of three parts, each of which is subdivided into three chapters. These three sections are correlated with three aspects of the traditional concept of God: the notion that God is (Part I) an immaterial substance, (Part II) a single subject and (Part III) the first cause of everything. The chapters of each part are related to their equivalents in the others as well as to their immediate neighbours so that every one performs a defined function within the architecture of the whole. The first part summarizes the traditional perspectives, and analyses what went wrong in their development; the second reviews promising developments; and these are taken up in the third, reconstructive section.

Within each part the first chapter takes up the subject to be treated in terms of what the author calls an "anxiety" (Cartesian, Okkhamist and Newtonian anxieties). The following chapters muster the resources of ancient and early modern theological traditions. Then late modern (particularly 20th Century) theological contributions, including Ecumenical and Feminist issues, are taken into account. In the final sections of each part relevant Biblical texts are adduced and interpreted in inspiring ways. Along the way, in particular in the sections on late modern contributions, the author also pays attention to recent developments in the natural and social sciences. The reader interested in the dialogue between theology and the sciences will find particularly interesting material here.

LeRon Shults commands a stunning knowledge of philosophical and theological traditions from antiquity up to our times. The summaries of these traditions are not only correct but inspiring, offering new perspectives on the documents considered. Here and there one might have wished for more concise presentation, with the main points of the argument in view; the author knows so much about his field that he tends to discuss details that are interesting in themselves but unnecessary for the main argument. In some places one would also have wished for a somewhat clearer recognition of differences in the meaning of homonymous terms: thus not all uses of "relation" or "relationship" in modern philosophical and theological literature actually point in the same direction! By applying sharper terminological discriminations in such places as this the contention that late modern philosophical and theological developments and scientific discoveries display a general "turn to relationality" would have been made even more convincing.

A greater consciousness of terminological nuances would also have given the summaries of scientific advances a sharper focus: these passages are sometimes a little blurry, in terms of the descriptions of scientific developments themselves as well as of their import for the reconstructive theological enterprise. Nevertheless, some inspiring ideas can also be found in these passages, such as the idea that the early modern concept of God was closely connected with the evolving mechanistic world view and that this connection aggravated the theological problems of combining human free will and divine omnipotence and of understanding the relations of an unchanging God to the processes of nature. This explains not only theological arguments in early modern documents, but also similar quite recent discussions such as the remarks of Einstein and Planck on the compatibility of theism with physics.

A final point, not in terms of criticism but as a concluding suggestion: impulses for reformulation of the doctrine of God could in our time also be gained from an engagement of Christianity with other religions. The concepts and ideas of other faiths may become as great a source of inspiration for new conceptions of the Divine as the traditional concern with philosophical thought. This seems obvious in relation to Islam and its concept of God, but an engagement with Buddhism as a non-theistic religion could also make a significant impact. One senses that LeRon Shults, if taking up such an idea in the future, would have some very interesting things to say about it, too – as his present book amply suggests.

Gebhard Löhr
When I was a student in mathematics and philosophy of religion I was very much impressed by Ian G. Barbour’s *Myths, Models and Paradigms: The Nature of Scientific and Religious Language*. Why? Knowing some books on topics such as ‘The Big Bang and Religious Thinking about the Origin’ and ‘Genesis and Darwin’, I felt a bit unhappy about the way they approached the relation between science and religion. My impression – which I could hardly express at that time – was that the comparison of the different issues in this field did not really make sense. The conclusions of these studies seemed to have no effect either on my faith as a believer or on my thinking about science. By reading Barbour’s rich analysis of conceptual and methodological problems in religious and scientific language, I realized that the different functions of the two disciplines were part of the answer to my question. Remembering this first encounter with Barbour, I was happy to review the present book.

Ian Barbour is, of course, internationally acknowledged as one of the pioneers in the field of science and religion in the twentieth century, and *Fifty Years in Science and Religion* gives a beautiful overview of his distinguished contribution. The book brings together nineteen key scholars to offer critical surveys of Barbour’s work and point to the future of the dialogue between science and religion by formulating new challenges and exploring unknown areas. After an introduction by the editor, Robert John Russell, Barbour describes his ‘Personal Odyssey’ in the world of science and religion. One of the remarks which struck me most (as a philosopher) was one related to my own interests in the field (p. 20): “… I have found that methodological issues are less likely to engage the interest of scientists”(!) The subsequent articles are organised under four headings: the first three respectively about Barbour’s contributions to science, to methodology, and to theological and ethical issues, and the last one about theological perspectives on his work. The book ends with a detailed bibliography of Barbour’s writings.

The first part tells the history of Barbour’s scientific research and teaching in experimental physics before his move to the field of science and religion. During this (for most people) unknown part of Barbour’s life, he for instance develops his interest in the integration of diverse academic fields. The second part is about the way the two seemingly disparate fields of science and religion can relate constructively. Much space is used to reflect upon ‘critical realism’ – the methodology which Barbour developed and which is seen as the most prevalent one in the past fifty years in this interdisciplinary field. Another central subject is of course Barbour’s famous four-fold typology of ways to relate science and religion: conflict, independence, dialogue and integration. As in the rest of this volume, each author here critically summarizes Barbour’s position and then proposes new ideas to develop the subject. The third part is divided into four sections. The first is entitled ‘God and Nature’ and addresses Barbour’s panentheistic metaphysics by focusing on his use of Process philosophy. In the next three sections about ‘Physics and Cosmology’, ‘Evolution, Anthropology, and Neuroscience’, and ‘Technology and the Environment’, Process philosophy is a recurring theme. It is therefore no surprise that the last part opens with a section on ‘Process Theology’. Two further sections on ‘Roman Catholic Theology’ and ‘Buddhist Theology’ complete the survey of his work.

The short overview of the topics in this book gives a good impression of the encyclopaedic mind of Ian Barbour. The book is a proof of his wide interests and exceptional skills in writing about almost everything in the field, and an exemplification of his influence on contributors interested in the (lack of) relationships between science and religion. While reading the book my judgement of Barbour changed bit by bit. I of course recognize the immense contributions he made: there is no way to deny these. But, based on my reading of *Myths, Models and Paradigms*, I had to admit that Barbour did a lot of work on comparisons that I am suspicious about. I realized that his writings on methodological questions are just a small part of his work. This made me think about my attitude toward the work of Barbour: how to revaluate his
voluminous contributions over the past fifty years?

Thanks to the contribution by Nancey Murphy I do now understand better which particular question within Barbour’s legacy is mine. Murphy makes clear that issues concerning the interactions between science and religion are sometimes not on a single spectrum and thus cannot be directly compared. I agree with her that if a comparison (like Barbour’s) starts with an analysis of the complex nature of religious language and religious practices, then it has to take into account the whole of science, including not only scientific results but also its social embodiment and its related worldview (something Barbour did not always do). Only then one can speak of a fair comparison. By following this route the intriguing question, posed by Murphy, may be raised (103): “Can I identify myself as a rational person and continue to live out my own life using the interpretive resources of the Christian tradition?” Barbour’s work still helps to ‘answer’ this question.

*Edwin Koster*

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**CREATION AND DOUBLE CHAOS:**

*Science and Theology in Discussion*

*Sjoerd L. Bonting*


At first glance, this is yet another general dialogue between Christian theology and the natural sciences. What sets it apart is the author’s take on theology, arising from his rejection of a central feature of the Christian doctrine of creation, namely, creation from nothing. Instead, he opts for creation from primordial chaos, of which more later.

In his introductory chapter, Bonting sets out his methodology for bringing science and theology into dialogue. He sees both as ‘God-given worldviews of a single reality’ (16), so that in principle there should be no conflict between them. Dialogue is possible because both disciplines seek a rational explanation of basic data: natural phenomena in the case of science and biblical data in the case of theology. Further, such dialogue can be direct without any mediating role for metaphysics, which he regards as essentially non-theistic and therefore unsuited for such a role. Interestingly, the role of religious experience is quietly marginalized to such an extent that the famous Lambeth Quadrilateral is reduced to a tripos (106) of Bible, tradition and reason (in that order).

After his methodological introduction, he moves on to give a brief overview of cosmic and biological evolution (the two aspects of the scientific world-view which he thinks most pertinent to the dialogue between science and theology). Inevitably, specialists in the various disciplines invoked in the course of this chapter will quibble with details but setting that aside Bonting has achieved a remarkably lucid non-specialist introduction.

He then turns his attention to the doctrine of the creation. Chapter 3 surveys a variety of creation stories from around the world (rather oddly, in light of his earlier insistence that the ‘data for the dialogue with science must be the canonical texts delivered to us’ [6]), before outlining what the Bible has to say about creation. He sees no evidence for arguing that the Bible offers any support for a doctrine of creation out of nothing. In chapter 4 he explores the origins of creation from nothing and concludes that the doctrine emerged from the Church’s conflict with Platonism and Gnosticism. While it may have had a certain apologetic value for the early Church, in Bonting’s view its introduction presented Christian theology with a number of serious problems, not least the problem of evil. He concludes his examination of the doctrine of creation from nothing with a brief survey of contemporary approaches. However, this is far too brief (13 theologians in fewer than 20 pages) to be helpful to the reader or fair to the theologians surveyed.

Over against the doctrine of creation from nothing, Bonting asserts in chapter 6 that God created from primordial chaos. God’s continuing action in the universe may, therefore, be seen as a matter of overcoming the remaining vestiges of chaos until complete order is achieved in the *eschaton*. While he denies that chaos as he envisages it bears any relation to gnostic evil matter, he suggests that evil may be seen as arising from the elements of chaos still present in the universe. In chapter
7, he explores how God acts in such a universe, concluding that he does so by influencing chaotic events in an undetectable manner.

The remaining seven chapters are devoted to various applications of Bonting’s chaos theology. He begins by addressing the problem of evil, which he has effectively dissolved by denying that God created the chaos from which evil arises and asserting that he is acting against evil continuously by reducing remaining chaos to order. Chapter 9 goes into greater detail concerning God’s action in the world, while chapter 10 focuses specifically on the cosmic Christ. He is critical of traditional doctrines of reconciliation, accusing them of portraying God as entrapped in divine justice when they assert that God cannot act in a manner contrary to God’s own nature. Apparently chaos theology offers an alternative, but he fails to explain how crucifixion and resurrection play a decisive role in overcoming residual chaos.

Chapter 11, on genetic modification and cloning, really adds nothing to either his dialogue between science and chaos theology or current debates on biotechnology. Likewise chapters 12 (on disease) and 13 (on extra-terrestrial life) seem to add little to the dialogue.

Finally he turns to the future, contrasting the pessimism of scientific forecasts with the glorious promise of the Bible. Judgement there will be, but he re-presents this as self-judgement. Having said that, his doctrine of the last things seems to be more informed by the biblical vision than by his own chaos theology. Little is said about the implications of the final state being one of complete order and zero chaos.

Creation and Double Chaos is well written and offers a refreshingly unconventional perspective on the doctrine of creation and the dialogue between science and theology. I must confess, however, that I remain unconvinced by his approach. In particular, I think the lack of serious engagement with contemporary creation theologies needs to be addressed if his thesis is to be taken seriously on the theology side of the dialogue.

Lawrence Osborn

ORIGIONAL SELFISHNESS
Original Sin and Evil in the Light of Evolution
D.P. Domning and M.K. Hellwig
Aldershot, UK: Ashgate (2006), 213 pp
ISBN 0-7546-5315-3 (hbk.) £45.00

Can evolutionary theory contribute to a new understanding of original sin? Undoubtedly, classic teaching on this subject has been challenged by science, as well as by biblical criticism, but can Darwinism really offer something constructive to a discourse concerning the source of evil and sin? Scientist Daryl P. Domning argues that evolutionary theory can shed some light not only on this issue but also on the perennial problem of theodicy – that is, giving some kind of explanation for evil and suffering.

Besides making his case, in this volume Domning also engages in critical dialogue with a theologian, the late Monika K. Hellwig. This gives the reader an unusual experience of a real science-and religion dialogue on the topic of human nature. Hellwig introduces the dialogue by a short, but helpful, survey of the history behind the constructions of original sin. She welcomes the present-day shift of focus of interest, from our sinful nature to our sinful situation, in need of critical analysis of the destructiveness found in human societies. Domning finds this analysis true, but lacking in explanatory force in relation to the suffering found in nature, as well as failing to explain why we sinned in the first place. But this does not mean that he accepts the pre-critical teaching, founded on Genesis cosmogony and monogenism. Instead he offers Darwinian evolution. After a well-argued rejection of possible counter arguments, such as might be raised by Christian fundamentalists, he portrays an evolving universe, moving towards perfection: in this he leans on thoughts expressed by Teilhard de Chardin, John Haught, and Karl Schmitz-Moormann. In her comment on this section, Hellwig argues that the function of Genesis 1-3 is to unveil our situation here and now, rather than to explain the source of sin. Through presenting suffering and evil as not inevitable, the narrative can work as a bearer of hope for future redemption, as well as making it clear that such redemption is necessary for every person.

However, this does not discourage Domning from exploring the origin of sin and evil.

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Starting with the well-known deconstruction of human acts into evolved behaviour which seeks to maximize reproductive success, he finds the roots of sin in selfishness. He claims that evolutionary selfishness is necessary and a positive good – indeed it is the driving force of the whole creative process (p. 108). It only becomes sinful when creatures endowed with intelligence and capable of moral responsibility enter the scene. Our genes influence us to act in selfish ways, but these can be overruled by human free will. This familiar argument, found also in for example Dawkins’ best-seller *The Selfish Gene*, is then set in a theological context – it is conscious and deliberate selfish behaviour, harming others, that constitutes sin in a world made autonomous by God’s selfless love. Jesus’ ethical teaching then marks another milestone, presenting perfect altruism. Domning considers this a major break with the “norms of ‘nature’” (132). Finally, the work of Christ brings about salvation, when supernatural grace builds on our evolved nature.

What is then to be said about *original sin*? The idea of a Fall is no longer tenable in an evolving universe. Rather, original sin should be understood as our universal need for salvation, brought about by the universal tendency to selfish behaviour (shared by all moral creatures) combined with a universal acquisition of that tendency (shared by all evolved creatures). Thus original sin retains an element of propagation rather than imitation in Domning’s analysis.

Finally, Domning takes on suffering. His main aim is to give suffering a purpose, in order to make it acceptable. He reaches his aim through starting from the fundamental condition of the universe, namely the “breakability of matter” (162). This allows for chance and accident to happen: in evolving beings this occurs through mutations, providing the necessary variation. Suffering and death are necessary by-products of this “breakability”. Moral evil is treated in a similar way. Original selfishness has been the force behind evolution in an autonomous world, and the fact that this threatens our free will with perversion is nothing but a necessity, that is until the promised salvation is proclaimed among humankind.

The book is a nice example of a real dialogue between a scientist and a theologian. The argument is similar to that found in philosopher Patricia Williams’ *Doing without Adam and Eve* (Fortress 2001). The main difference is that, while the philosopher presents a synthesis of science and theology, Domning and especially Hellwig are much clearer about the differences that remain. In her final comment, Hellwig is hesitant to reduce the doctrine of original sin in the way Domning suggests. It is not only nature that needs transformation, but also our human culture. I find even more difficulties, because Domning and Hellwig, Catholics both, never cross their shared denominational border. In my opinion, there is also a need for transformation of the religious constructions surrounding our human situation in a suffering world. The question is whether suffering could not still be less abundant and more fairly distributed. And the ongoing reflection on the goodness and power of God is not brought to an end by this volume.

*Eva-Lotta Grantén*

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**The next ESSSAT publications**

The Vice-President for Publications, Dr Hubert Meisinger, reports that work on ESSSAT’s forthcoming publications, *Studies in Science and Theology*, Vol. 11 and *Issues in Science and Theology* Vol. 5, has already begun. Nearly 30 papers have been submitted for Studies in Science and Theology, and Dr Meisinger hopes to inform authors about the outcomes of the review process in late October or early November. Meanwhile, he thanks all who have submitted articles.
**Essay-review**

**ALONE IN THE WORLD:**
**Human Uniqueness in Science and Theology**

*J. Wentzel van Huyssteen*

Wm B Eerdmans (2006) 365 pp
ISBN 0-8028-3246-6 (hbk) $40.00, £22.99

In the bar, on the second or third nights of science and religion conferences, old-stagers of the field have sometimes said to me that they fear it is getting repetitive. The great 20th century themes, especially from the interface with physics, seem to them to have been essentially argued out. They will cite the block universe versus time’s thermodynamic arrow, the anthropic principle versus the multiverse, or the two kinds of indeterminacy (quantum and chaotic) and their implications for freewill and divine action, as examples of topics on which we are in no sense all agreed, but for which the arguments both ways are known and most of us have adopted our positions.

Biology in turn, these friends would say, has been recognized for its moral challenges, both practical (in medicine, bio-ethics and ecology) and from straightforward observation (the horrors of competition and of predatory behaviour), but no clear forward path exists. As for evolution, no-one can silence the Creationists, but the proper answers to them had already been given in the 19th century. Details of the challenges from neuroscience and from mainstream psychology may be changing rather faster, but here too those of the mood I have described are inclined to contend that “plus ça change, plus c’est la même chose”.

Yet there remains at least one huge territory far too little explored — and some of my disenchanted friends arent even aware of it. They, more than any others, should read this book!

Wentzel van Huyssteen (henceforward WvH), McCord Professor of Theology and Science at Princeton Theological Seminary (and, I am happy to say, an ESSSAT member) here extends the frontiers of theological anthropology. I write “theological” rather than “Christian”, because his analysis is not essentially Christological. While he draws extensively on Christian theologians he makes powerful use also of Jewish thought, and I believe his key themes should be of equal interest to Moslem scholars. The approach, then, is for the most part Abrahamic rather than specifically Christian: indeed, he seeks to move “beyond those theologies that proceed ... inside the circle of a privileged discourse, logic or community” (p 301). Even more important, however, is that his whole style is interdisciplinary: while very much the theologian himself, he is deeply informed about evolutionary psychology and epistemology and about the studies of human origins by archeologists and paleo-anthropologists. He has even experienced for himself, in situ, the Upper Paleolthic cave paintings of south-western Europe.

The resulting book is thus the first series of Gifford Lectures to be illustrated by high quality colour reproductions from the caves of Lascaux and Gargas, Cougnac, Niaux and Pech-Merle. In fact the physical standard of the whole volume is of a class higher than I have ever before seen for Gifford, or any other, academic lectures in theology and comparable fields. Typesetting and margin titles are on a par with those of, say, Freeman’s Scientific American books. To do this, yet price the hardback product so modestly, indicates that Eerdmans have predicted big sales, and I hope and believe they will be proved right. “Hope and believe” because, though far from faultless, WvH’s book is seminal and challenging, and ought to be very widely read.

I have only one quarrel with the publishing – that the dust-cover describes these as “The Gifford Lectures”. “Gifford Lectures” would be right, but the definite article is wrong! Independent series of lectures on Lord Gifford’s bequest have been given in each of four universities in Scotland since 1888 (Jaki, 1986; Spurway, 1993). Eerdmans’ title page, unlike their dust cover, correctly states that this particular series was delivered in Edinburgh University in 2004. And, as a former chair of Glasgow’s Gifford Committee, I am happy to say: “Well done, Edinburgh!”

WvH’s Giffords are presented in the published volume as six chapters, but their lengths suggest that some single chapters embody the material from two or more lectures. However, though I have no wish to be hurtful, to a major scholar and a friend, I have to say that for my taste the book starts badly. Readers familiar with WvH’s writing will know that he is exceptionally concerned to classify his own thought processes and place them within every possible context. At least for me, in Chap 1 of the present work this concern becomes protracted and minimally illuminating. Worse,
it introduces several ugly neologisms which disfigure the book. We know, of course, that everything worth quoting will, for this author, be “post-foundationalist”: OK, the word is used several times too often, but it does have meaning! “Revision”, however, is not a noun for WvH but a verb (from which he has therefore to construct a new noun, “revisioning”). If “revision” means anything different from “revise”, it is a difference which escapes me. However, should an alternative be deemed essential, there are plenty of verbs which retain the merit of being English too: “recast”, “refigure”, “refashion” or “reformulate” would all have made his point perfectly. A later horror is “symboling”, which undoubtedly means just ‘symbolizing’! “Transversal” (adjective) and “transversality” (noun) are even more awful, but WvH did not invent them: they are taken from a philosopher, Wolfgang Welsch, for whom (to quote his website) they represent “a move away from static notions of rationality: the axis of reason is rotated from verticality to horizontality, and human reason itself becomes a dynamic faculty of performative transitions…”! After 45 pages of such stuff, I was crying out, “Let’s get on with it!”.

In Chap. 2, however, WvH does get on with it. The chapter is entitled *Human uniqueness and cognitive evolution*, and its intellectual progenitor is Darwin’s *The descent of man*. In fact, being a bit suspicious of all claims to write without foundation, I would have to suggest that Darwinism is the foundation of this book’s whole approach. I felt the same when reading philosopher Ruth Millikan’s difficult but splendidly challenging *Language, thought and other biological categories* (1984). “It is possible to deny”, she wrote, “that there are infallible observations of any sort that come epistemologically first”, and she seeks to align herself with this denial. Yet for her, as for WvH, the idea of evolution by natural selection does and must go unchallenged! My own thought starts from the same standpoint, so I am eager to follow both authors towards their conclusions – but whether they are quite as free of foundationalism as they both imagine, I beg leave to doubt.

Where then, does WvH take us, from his Darwinian foundation? Firstly, to an admirably lucid outline of modern scientific work on the descent of *Homo sapiens*, which rightly stresses the short time (well within the last 100,000 years) in which it is now considered that our ancestors developed both symbolic intelligence and its derivative, language. He makes good use, here and later, of the book which opened my own eyes to the excitement of this topic 10 years ago, *The Prehistory of Mind* by Stephen Mithen (pronounced “My-Then”). Mithen was himself building on the evolutionary psychologists Cosmides & Tooby (1994 et prec), for whom the mind consists of a series of modules, each hard-wired by natural selection to tackle a specific task. Mithen’s further idea was that the Paleolithic cultural explosion occurred when modules became able to cross-relate. His term for this is “cognitive fluidity”, and it was this intellectual development which, he feels, made possible metaphorical thought, symbolism and consequently language.

Recently, Mithen (2005) has come to think that our predecessors in Europe, whom *H sapiens* displaced about 30,000 years ago, had greater musical ability, though less analytical and linguistic. If this is true, WvH is a little derogatory towards them, writing (63) that “they clearly had a simpler ‘tool kit’ of intellectual capacities”. Perhaps the tool kit was different rather than simpler, though it clearly had less survival value? A little later (66) WvH cites the remarkable conclusion from DNA studies that the mitochondria (metabolic powerhouses) of all modern human cells derive from a single progenitor, “Mitochondrial Eve”. He concludes that this finding refutes the “deep and invidious racial distinctions” which dog our society. Actually it doesn’t achieve this by itself, for the DNA in our mitochondria is almost trivial, in quantity and significance, relative to that in our chromosomes. Rather, the concept of major racial distinctions is refuted by the conclusion from fossil, archeological and all DNA studies combined, that early modern humans came out of Africa about 70,000 years ago, and we are all descended from them. But this slight inaccuracy is insignificant beside the importance of the point – which itself underlines the fact that, amid the overwhelming diversity of so much of the biological world, only one species of hominid remains on the planet. Hence WvH’s title.

The last 30 pp of this key chapter come face to face with the perception (76) that “the theory of evolution is in essence a theory of knowledge”, for “evolution itself is the process by which knowledge is achieved”. Drawing particularly on Henry Plotkin, Franz Wuketits and Peter
Munz, WvH spells out the concepts of evolutionary epistemology, according to which knowledge is an “incorporation of the world” by minds which it is honing (79). At its simplest, the contention is that minds form concepts which may or may not apply closely to the world: often these concepts then influence behaviour, and behaviour which follows from sound concepts is a great deal more likely to lead to survival, and even to flourishing, than behaviour based on unsound ones. If I want to jump a chasm, and my concept of distance is an underestimate, I am unlikely to have a second chance – natural selection in the raw! Concepts may thus be characterized as hypotheses, and those which survive cannot be too far removed from reality. The evolutionary epistemologist is thus a “hypothetical realist”. It’s all very Popperian, and WvH quotes considerably from Popper, though surprisingly not from the other early giants of evolutionary epistemology, Jean Piaget and especially Konrad Lorenz (e.g. 1982).

What, then, of religion? Sadly, “evolutionary epistemology has been almost totally neglected by contemporary theology” (75), a blindness which has “reinforced esoteric, disembodied and overly abstract notions of human uniqueness” (311). Yet even the least theistic of WvH’s sources, Wuketits, acknowledges that a need for metaphysical explanations is a general characteristic of human kind. For him, however, metaphysical belief “results from specific life conditions in prehistoric times”, and humans have continually “invented irrational belief systems whenever they lacked ‘rational’ explanations” for the phenomena of their experience (94). Against this, WvH fairly asks, “Why should we so suddenly, and only at this point … completely distrust the phylogenetic memory of our ancestors?”. Instead, he argues (105) that “the prehistory of the human mind points to the naturalness of religion and supports the broader argument for the rationality and plausibility of religious belief”. This is a crucial claim, but is it valid? That religious beliefs have, on balance, been advantageous to survival is clear, but does that show them to be true? What is tested by natural selection is behaviour. Our belief about the width of a chasm is subject to very direct test, our belief in a supernatural being is not. I shall return to this point later.

Chapter 3 is a study of the imago Dei doctrine. Placing this chapter between that on biological evolution and later ones dealing with cultural anthropology is in some respects awkward, but I’m sure WvH has done it to emphasize that his concern is that of the theologian: he is using science very extensively and impressively well, yet fundamentally he is not writing science but philosophical theology. He is approaching it this way because “The biblical idea that human beings are created in the image of God and that Homo sapiens are therefore placed more or less at the centre of the created universe seems to be especially challenged in our time” (116).

The chapter’s central theme is the extent to which the imago Dei concept has changed, even within theology itself, since Genesis 1:26-27, and the Babylonian texts which preceded it. In the Christian era, every writer up to Aquinas, and Jewish thinkers such as Philo, considered the human intellect as the imago. Among the arrogances which this outlook reinforced was the belief in male superiority! In the modern era, existential thinking about the whole person in relation with the world, followed up by feminist critiques and ecological concerns, have revolutionized and humanized theology. Drawing extensively on LeRon Schults, Noreen Herzfeld, Wolfaard Pannenburg, and later on Phil Hefner and Robert Jenson, WvH charts the radical alterations of the imago concept, which yet retain what he terms its “canonical core”. This term derives from a “theory of traditions”, worked up in Chap 1, which seems to consist simply in keeping an open-minded balance between stasis and development; but, as remarked before, our author has a driving need to put labels on his modes of thought. Labelled or not, the outcome here is rewarding, and there can be no better encapsulation of its liberal humanity than in a long quote from a Princeton student, Jessica Bratt, stressing the image of God in the mentally handicapped and those who live in vegetative states.

Chapters 4 & 5 return to the theme of human origins, but mainly this time from the standpoint of prehistory rather than evolutionary biology. The cultural explosion of the Upper Palaeolithic saw rapid developments in artefacts, both functional and symbolic. The latter are now almost universally agreed to imply the maturation of language too, for – as Terence Deacon in particular has extensively argued – language is hinged upon symbolism. Indisputably the most powerful and compelling
examples of Palaeolithic symbolic imagery are the cave paintings. Although acknowledging warnings that the significance of each of these images should be separately considered, WvH is strongly attracted to David Lewis-Williams’ view that a great many were shamanistic. Our ancestors in the caves would feel themselves completely surrounded by the underworld, and the frequent images of human hands, pressed on the rocks amongst the animal drawings, suggest that “the rock face was like a veil suspended between this world and the spirit-world … that seethed beneath it” (209).

Enthralling though such thoughts surely are, it is proper to ask at this point what WvH sees as their importance for modern theology. His answer is that he wants to refresh and reformulate theological anthropology: “Now supported by voices from palaeoanthropology, I would call for revisioning [sic!] of the notion of imago Dei in ways that … acknowledge our embodied existence, our close ties to the animal world and … those hominid ancestors that came before us, while … focusing on what our symbolic and cognitively fluid minds might tell us about the emergence of … consciousness, personhood and the propensity for religious awareness and experience” (215).

In his final hundred or so pages, WvH engages with a further eclectic selection of Christian, Humanist and Jewish thinkers, Edward Farley, Alasdair MacIntyre and Abraham Herschel being prominent, and concludes that “if scientific contributions to understanding the issue of human uniqueness are taken seriously, the theological notion of the imago Dei is powerfully revisioned as emerging from nature itself. For the theologian this interdisciplinary move implies that God used natural history for ... religious belief to emerge as a natural phenomenon” (322). Conveniently also, for the encounter with science, though challengingly for comfortable beliefs, “in the Biblical creation story image and likeness do not lead to immortality but to holiness” (295).

Finally, however, I return to the question, not of the origin of monotheistic beliefs, nor of their moral challenge, but of their truth. WvH repeatedly admits the difficulty, e.g.: “A theory about the emergence of religious ... concepts does not at all answer the philosophical question about the validity of religion, or ... whether ... religious imagination relates to some form of reality” (263). If we follow the logic of evolutionary epistemology to its ultimate, must we not conclude that statements purporting to refer to realms totally beyond the world in which natural selection is operating, and the time and space within which that world exists, have been utterly spared the tough reality-checks which give us good grounds for believing that our concepts of this world are reasonably valid? Of course, one can claim that God implanted the notions which evolution could not validate, but for the thorough-going Darwinian that’s a sky-hook – tantamount to mental, as against physical, Creationism.

WvH never quite confronts this problem. Perhaps he implies as his answer the indirect comment of the paleoanthropologist Ian Tattersall: “It is ironically in our notions of God that we see our human condition most compactly reflected. Human beings...are incapable of envisioning entities ... that cannot be construed from what they know of the material world. The notion of God is just such an entity ... our concepts of God remain resolutely anthropomorphic” (193). “However, that does not imply the illusory character or non-existence of God, but might actually reveal the only satisfying way to talk about God” (283). This may suffice during prayer and worship, but the would-be theological realist will surely feel that work remains to be done.

Neil Spurway

References not cited in Alone in the World:


NB! In this whole connection, recall also the work of 2004 ESSSAT Research Prize winner, Caspar Söling (ESSSAT News 13.1 & 14.2).
RECENT ESSSAT PUBLICATIONS
(Distributed without charge to members paid up in year of publication)

Creative Creatures. Values and Ethical Issues in Theology, Science and Technology
Issues in Science and Theology, Volume 3
Ulf Görman, Willem B. Drees, Hubert Meisinger (eds)
London & New York: Continuum/T&T Clark (2005) xiii + 191 pp
ISBN 0-567-03089-X £60.00 hbk, £25.00 pbk, from booksellers
Contains 13 essays (all the main lectures of ESSSAT’s Nijmegen conference, 2002, plus selected articles from the paper presentations) and an introduction by Willem B. Drees. Contributors include René P. H. Munnik, Nancey Murphey, Frans B. M. de Waal, Margaret A. Boden and Ulf Görman

Streams of Wisdom? Science, Theology and Cultural Dynamics
Studies in Science and Theology, Volume 10
Biennial Yearbook of European Society for the Study of Science and Theology, 2005-2006
Hubert Meisinger, Willem B. Drees, Zbigniew Liana (eds)
ISBN 91-975249-2-1 €15, plus postage and packing, from ESSSAT Treasurer.
Organized in four parts: Human Nature, Sociobiology and Culture has articles casting light on aggression, altruism, the need for a participative consciousness, and human psychology. Methodology, Epistemology and Culture discusses and introduces new models to relate science and theology and considers the roles of authority and experience in each field. Theology, Technology and Culture questions the relevance and discusses the benefits and deficits of technology for the science and religion debate on the basis of computer modelling, information theory, nanotechnology and the relationship between nature and culture. The essays of the last section, on Theology, Science and Culture, struggle with the notions of culture, knowledge, wisdom and purpose from theological, philosophical and scientific perspectives. Some papers here with bible exegesis, education and historical/cultural comparisons related to the science and religion dialogue. Contributors include Marie Vejrup Nielsen, Hubert Meisinger, John Teske, Michael Stenmark, Niels Henrik Gregersen, Noreen Herzfeld, F. LeRon Shults, and Peter M. J. Hess.

Wisdom or Knowledge? Science, Theology and Cultural Dynamics
Issues in Science and Theology, Vol. 4
Hubert Meisinger, Willem B. Drees, Zbigniew Liana (eds)
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Contains extended versions of the five plenary Templeton Lectures of our Barcelona Conference (2004) by Manuel Artigas, Celina Deane-Drummond, Lucio Florio, Peter Harrison and Walther Ch. Zimmerli and five outstanding contributions from the paper presentations at the conference by Dirk Evers, Michael Fuller, Antje Jackelén, Alexei Nesteruk and Chris Wiltsher. The variety of perspectives from different cultural backgrounds and from the viewpoints of philosophy, ethics, ecology, hermeneutics, history and Eastern Orthodoxy, reflects the role of culture on the meta-level of writing and reading. The reader herself or himself will be encouraged to drink from the streams of wisdom and knowledge investigated, in order to think anew about the simplistic separation between “two cultures” which has prevailed too long in scientific, theological and cultural thinking.

* Distribution to members currently in progress.
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