

Notes on Contributors

Tibor Frank (tzsbe@hu.inter.net) is Professor of History at Eötvös Loránd University, Budapest, Hungary. His main field of research is transatlantic studies, currently focusing on U.S.—Central European political, diplomatic, social and cultural interactions between the mid-19th and the mid-20th centuries. He has authored five books, most recently *Genius in Exile: Professional Immigration from Interwar Hungary to the United States* (2002).. His thirteen edited books include *A History of Hungary* (1990, paperback 1994, edited with Peter F. Sugar and Péter Hanák). He has been a visiting professor at UCSB, UCLA, University of Nevada, Reno, and Columbia University.

David Kettle (djk@kettle.force9.co.uk) is an Anglican priest who has worked in England and New Zealand, and is the Coordinator of the Gospel and Our Culture network in Britain (www.gospel-culture.org.uk). His article “Cartesian Habits And The ‘Radical Line’ Of Inquiry” recently appeared in *TAD* 27:1 (2000-2001), 22-32.

Mark T. Mitchell recently completed his Ph.D. in the Government Department at Georgetown University. He is currently a postgraduate fellow at Liberty Fund in Indianapolis, Indiana. In a forthcoming paper in *Modern Age* he proposes Polanyi as a viable alternative to the dead-end reached by the modern/post-modern project.

Submissions for Publication

Articles, meeting notices and notes likely to be of interest to persons interested in the thought of Michael Polanyi are welcomed. Review suggestions and book reviews should be sent to Walter Gulick (see addresses listed below). Manuscripts, notices and notes should be sent to Phil Mullins. Manuscripts should be double-spaced type with notes at the end; writers are encouraged to employ simple citations within the text when possible. MLA or APA style are preferred.; because the journal serves English writers across the world, we do not require anybody’s “standard English.” Abbreviate frequently cited book titles, particularly books by Polanyi (e.g., *Personal Knowledge* becomes *PK*). Shorter articles (10-15 pages) are preferred, although longer manuscripts (20-24 pages) will be considered. Consistency and clear writing are expected.

Manuscripts normally will be sent out for blind review. Authors are expected to provide a hard copy and a disk or an electronic copy as an e-mail attachment. Be sure that electronic materials include all relevant information which may help converting files. Persons with questions or problems associated with producing an electronic copy of manuscripts should phone or write Phil Mullins (816-271-4386). Insofar as possible, *TAD* is willing to work with authors who have special problems producing electronic materials.

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REVIEWS

Thomas F Torrance. *The Ground and Grammar of Theology*. 2nd edition. (September 2001) Continuum International Publishing Group ISBN 0 567 08778 6. \$29.95, paper.

One of the rules for acceptable behaviour in the academic world is to keep to one's own specialism. This rule inhibits empire building by aggressive colleagues and avoids the embarrassment caused by hearing scholars eminent in their own field talking egregious nonsense about subjects with which they have only a nodding acquaintance.

There are, however, exceptions to this general rule. One such was Michael Polanyi who not only possessed the critical analytic powers valued by academia but was able to see beyond his own specialism and to synthesise a general post-critical epistemology. Polanyi's friend Thomas Torrance is another thinker of this calibre. I remember my amazement at reading his commentary on Maxwell's groundbreaking paper: 'A dynamical theory of the electromagnetic field'. Here was a professor of theology writing with deep understanding about a topic in physics that has defeated, and continues to defeat, many physicists who understand the mathematics of Maxwell's equations but fail to grasp Maxwell's ideas or his method. Since then I have read everything written by Torrance I could lay hands on and learned from him much about my own subject of electromagnetics as well as his subject of theology.

When I saw a notice of the reissue of Torrance's lectures called *The Ground and Grammar of Theology*, I at once sent for a copy and have now read it several times. I was not disappointed. This book seems to me to provide the key to Torrance's other writings because it contains the basis of the themes he has developed in them.

There are 6 chapters. The first one, entitled 'Man the Priest of Creation', sets the scene by affirming the unity of creation. Space and time provide the rationality that motivates both scientific and theological enquiry. That implies that science and theology have much to say to each other. Man and the universe are bracketed together and this anthropic principle assigns a 'metaphysical' role to man. Natural science and theology are partners before God. That does not mean that the two fields of investigation should be confused. Each subject must be investigated in accordance with its own nature. Nevertheless there are many analogies between them. Moreover both science and theology are in a state of flux and are moving from an atomistic to a relational understanding. In theology, this means that the Being of God and the Act of God are closely joined.

In the second chapter, 'Emerging from the Cultural Split', Torrance attacks 'dualism' as the source of all kinds of error both in science and theology. This is a topic that recurs in his other books, where it is not always clear what is meant by dualism. It is therefore particularly helpful to have a full explanation in this book.

He traces the origins of dualism to the thought of Plato and Aristotle, who separated terrestrial rectilinear motion from celestial circular motion and used this scientific distinction as an example of the division between empirical and theoretical knowledge. This involved a sharp contrast between the physical and the spiritual, the temporal and the eternal, and the mortal and the divine.

Ptolemaic cosmology followed Aristotle in the distinction between phenomena above and below the moon, but this scientific dualism was overthrown by the work of Copernicus and Galileo. However

Aristotelian science continued to be very influential in theology. Augustine, who stressed the antithesis between God and the world, heaven and earth, and the eternal and the temporal, reinforced dualism. This resulted in a fusion of Aristotelian science with Christian belief in the Middle Ages.

In spite of the collapse of Aristotelian cosmology, dualism remained dominant in science. Newton distinguished between absolute time and space and relative time and space. He identified the absolute space and time with the mind of God. Dualism was also prominent in the writings of Descartes and Locke and their philosophy influenced theology. Kant's effort to save causality from the scepticism of Hume connected sense experience with the structure of human consciousness and Kant taught that there was no possibility of knowing things in themselves. This transferred Newton's God-related time and space to a human mind-related time and space and severed the connection between God and humanity and between science and faith.

Biblical interpretation was affected strongly by Kant's philosophical dualism. A distinction was made between *Geschichte* and *Historie*, faith and hearing, the Word of God and the Word of Scripture. The idea of incarnation came to be regarded as a mythological statement about human consciousness, so that one cannot know anything about Jesus Christ as he is in himself. All we can know is the impression he made on his contemporaries. Since we cannot know anything about them either, we are faced by an infinite regress.

The chapter ends on a more cheerful note. Modern science, especially in relativity theory, has abandoned dualism and recovered the unity of form and being. That discovery is influencing the human sciences and theology.

In the third chapter, 'Creation and Science', Torrance turns to the other side of the interaction of science and theology. Not only can theology learn from science, but science can also learn from theol-

ogy. Natural science requires more than a *Weltanschauung*. It requires a *Weltbild* and this has been derived from the Judeo-Christian doctrine of creation. That doctrine is not the Stoic one of God as the soul of the world nor the Aristotelian view that God is the 'unmoved mover' of the universe. Nor does it operate with a duality that separates the real, eternal and changeless from the unreal, apparent and evanescent. God is real and good and he is living and active. He is not part of the world, but has become incarnate in the world. These Christian insights were formulated by theologians in Alexandria in the 4th and 5th centuries in terms of three masterful ideas. 1. The rational unity of the universe and its creation out of nothing by God. 2. The contingent rationality and intelligibility of the universe. 3. The contingent freedom of the universe.

These ideas destroyed the identification of God and the universe. They also destroyed the concepts of determinism, necessity and fate. They replaced a closed cyclical universe by an open, developing universe. Instead of describing God in terms of fixed static properties, he was seen as dynamic and active. For example, he was not 'eternally creator', but he freely chose to become creator and to become incarnate in the creation.

These early Christian ideas have proved to be the essential foundation of natural science with its central tenet of the contingent intelligibility of the world.

In Chapter 4, 'The Transformation of Natural Theology', Torrance discusses the effect of the principles of unity and contingency on the development of natural theology. For much of Christian history, natural theology has been contrasted with revealed theology. Natural theology was devised to provide a bridge between the world and God. It was hoped that eternal patterns could be 'read off' from the book of nature and this made the outlook of natural theology largely this-worldly. It tended to assume a naturalistic and mechanistic stance that turned its back on God, *acsi deus non daretur*. The

world system came to be closed on itself and a secular culture displaced the sacral culture of the Middle Ages.

Various factors combined to show the inadequacy of natural theology as a logical bridge to God. Among these were Hume's scepticism about causality, Kant's rejection of objective intelligibility and the logical positivism of the Vienna circle. The attempt to find a moral rather than a logical basis for natural theology was unsuccessful. Barth clarified the difficulty by pointing out that an independent natural theology was impossible because there is only one God who has revealed himself in Jesus Christ. Natural theology must be treated as a branch of revealed theology.

This development has an important analogy in the development of geometry in science. Greek Euclidean geometry was conceived as an axiomatic system independent of physics. Gauss and Riemann showed that Euclidean geometry was a special case of a more general geometry of curved spaces and Einstein found that the geometry of space and time was Riemannian. Thus geometry was incorporated into physics and had to be treated as an experimental subject instead of an axiomatic one.

In terms of theology, this development in physics points to the unity of form and being and it joins natural to revealed theology. It also points to the fact that natural theology must accommodate itself to the temporal singularity of the universe. Contingency requires that we study the universe according to its given nature, which is that of 'coherent singularity'. This is true both in science and in theology, both of which summon us to a disclosure of reality. Torrance's argument here is very similar to that of Polanyi.

Chapter 5, 'Theological Science', returns to the theme of parallel developments in theology and science. The three principles of Alexandrian theology discussed in Chapter 3 proved to be essential for modern natural science, but theology lost sight of them. The loss of the ideas of contingent rationality and freedom damaged theology. Science can now

liberate theology, because man as scientist can be seen as the priest of creation as he identifies and names a world that is dumb without him. Natural science can be seen as a religious pursuit. Torrance illustrates this theme by three epigrams of Einstein.

The first of these is that 'God does not play dice'. This states Einstein's belief in the objective intelligibility of the universe, a belief shared by Polanyi. Torrance argues that theology must operate with the same belief. It must not be content with speaking about 'image' or 'symbol', but instead use the idea of analogy. Mythos must give way to logos. In particular Christ must be understood as the self-revelation of God; not the coming of God into man, but the coming of God as man.

Einstein's second statement that 'God does not wear his heart on his sleeve' draws attention to the inadequacy of positivism. The order of nature cannot be read-off from the phenomena. Theology faces a similar task, where we need to use 'disclosure models' rather than 'pictorial models' or 'theoretical models'.

The third epigram is 'God is deep but not devious'. The universe is essentially trustworthy. In theology, that points to hope for the future, both in a teleological and an eschatological sense. It is hope informed by the love of God as seen in the incarnation, death and resurrection of Christ. At the end of the chapter, Torrance cautions that he is not basing theology on science, but using science to provide analogies.

The final chapter of the book, 'The Basic Grammar of Theology', deals with the internal relations and intrinsic structures of theology. Torrance dismisses the bifurcation between the One God of natural theology and the Triune God of revelation. The logos must not be separated from the being of God. Nor must the being of God be separated from his action. Torrance posits three levels of understanding in theology. The basic level arises from experience and worship. The second level deals with the revelation of God as Father, Son and Holy Spirit. The

highest level arises when we seek to understand the relationships in the Godhead. At this level, we encounter the *homoousion* of the Nicene Creed and the idea of *perichoresis*, both of which throw light on the person and work of Christ. Torrance finds an analogy between this pyramidal structure of theological knowledge and scientific knowledge.

I have to confess that this chapter does not entirely convince me. That is partly due to the unfamiliar terms, but I also have misgivings about the structure of knowledge in terms of levels. However, all in all, this is a wonderfully lucid and accessible book. It is profound and scholarly and stretches one's mind. Best of all it is full of Christian faith in God and hope for the future. Here is nourishment for the spirit as well as the mind.

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APPRAISAL/POLANYI CONFERENCE 2002 The Person in the 21st Century

April 5th (3 pm) to April 6th (5 pm)
Hugh Stewart Hall, The University of Nottingham

Speakers and papers arranged so far: Alan Ford (Gloucs. Univ.): *The Divided Self in Modern Art*; Jan Olof Bengtsson (St Cross Coll. Oxford): *Personal Idealism and Today*; Anna Castriota (Oxford Brooks). The programme can accommodate 3-5 more papers.

Papers: The Conference is organised like a seminar, with a round-table discussion of the papers which are issued in advance. Each session is 60 or 75 mins, with 10 mins (max.) for a brief introduction and the remainder for discussion. Not all papers need be on the special theme.

For information regarding conference fees and bookings and offers of papers, please contact the organiser as soon as possible.: Dr R. T. Allen, 20 Ulverscroft Rd, Loughborough, LE11 3PU, England. E-mail: rt.allen@ntlworld.com; Tel. & Fax : (44)(0) 1509 552743 <http://homepage.ntlworld.com/rt.allen>

Polanyi Society Membership

Tradition and Discovery is distributed to members of the Polanyi Society. This periodical supercedes a newsletter and earlier mini-journal published (with some gaps) by the Polanyi Society since the mid seventies. The Polanyi Society has members in thirteen different countries though most live in North America and the United Kingdom. The Society includes those formerly affiliated with the Polanyi group centered in the United Kingdom which published *Convivium: The United Kingdom Review of Post-critical Thought*. There are normally three issues of *TAD* each year.

Annual membership in the Polanyi Society is \$25 (\$10 for students) beginning in the fall of 2002. The membership cycle follows the academic year; subscriptions are due September 1 to Phil Mullins, Missouri Western State College, St. Joseph, MO 64507 (fax: 816-271-5680, e-mail: mullins@mWSC.edu). Please make checks payable to the Polanyi Society. Dues can be paid by credit card by providing the card holder's name as it appears on the card, the card number and expiration date. Changes of address and inquiries should be sent to Mullins. New members should provide the following subscription information: complete mailing address, telephone (work and home), e-mail address and/or fax number. Institutional members should identify a department to contact for billing. The Polanyi Society attempts to maintain a data base identifying persons interested in or working with Polanyi's philosophical writing. New members can contribute to this effort by writing a short description of their particular interests in Polanyi's work and any publications and /or theses/dissertations related to Polanyi's thought. Please provide complete bibliographic information. Those renewing membership are invited to include information on recent work.