Thomas F. Torrance History of Science Collection

History of Science Collections, University of Oklahoma Dr. Kerry Magruder, Curator

Thomas F. Torrance, b. 1913 Chengdu, China – d. 2007 Edinburgh

Scope and Access

The Thomas F. Torrance History of Science Collection of the History of Science Collections of the University of Oklahoma recognizes Torrance's significance for the history and philosophy of science, particularly in matters related to science and religion. We seek to preserve and make available:

- 1. All of Torrance's print publications in various editions.
- 2. Modern sources upon which Torrance relied and engaged.
- 3. Primary works of figures Torrance discussed, from antiquity through the 20th century.
- 4. Unpublished materials, papers, and publications of Torrance's contemporaries and students who engaged him substantively on matters of science and religion and the history and philosophy of science.
- 5. Unpublished materials, papers, and publications of scientists and scholars who, now and in the future, continue to engage Torrance substantively on matters of science and religion and the history and philosophy of science.

The Thomas F. Torrance History of Science Collection consists of both books and other print publications, plus an archive of unpublished materials in varying formats. It will remain an open collection, augmented in an ongoing manner as new materials become available.

The Thomas F. Torrance History of Science Collection was created in May, 2022, seeded with a small sampling of initial materials. It is now ready to acquire donated and purchased materials consistent with the scope described above. It is formally launched as of 2023, with substantial donations from Robert T. Walker, Donald Walker, and others. It will become open to visiting scholars in 2024, with an online finding aid updated on an ongoing basis. The History of Science Collections is committed to an open access policy as far as donor wishes and copyright allow. For general inquiries or to discuss possible donations, acquisitions, or research fellowships, contact Prof. and Curator Kerry Magruder: kmagruder@ou.edu.

History of Science Collections, University of Oklahoma

The OU History of Science Collections, founded in 1949 with an initial gift from Everette Lee DeGolyer, is a premier research collection. Its holdings include 100,000 print volumes across diverse disciplinary subject areas, along with current publications in the field. The Collections supports multidisciplinary research in every chronological period, geographic region, and subject area of science, technology, and medicine. Among the oldest items are a cuneiform brick (ca. 1300 BCE), and a number of medieval and early modern manuscripts. The Collections' oldest printed book is Hrabanus Maurus, *Opus de universo* (1467). Highlights include all the major works,



scientific and non-scientific, of figures such as Copernicus, Tycho, Kepler, Galileo, Newton, Darwin, et al. Astronomy, physics, natural history, geology, technology, and science and religion are traditional areas of strength for the print holdings. Areas of recent concentration include women in science, Islamicate science, star maps, computer history, and science and technology in Asia. Archives support research in the history of geology, meteorology, technology, physics, and science and religion, among other topics. Digital collaborations include the Darwin Online project of Cambridge University; the Galileo digital library of the Museo Galileo in Florence, Italy; and Edition Open Sources with the Max Planck Institute for the History of Science in Berlin. A travel fellowship program, endowed by the Andrew W. Mellon Foundation, supports short-term use of the Collections by visiting scholars. The Collections works closely with the Department of the History of Science, Technology, and Medicine, in which the Curator is a faculty member.

Rationale

The interdisciplinary topic of science and religion has long been a deep and comprehensive strength of the OU History of Science Collections' print holdings, from before Galileo to Darwin and beyond. It is also a long-standing strength of the OU Department of the History of Science in terms of regular course offerings and faculty interests (including that of the Curator, Kerry Magruder). Yet in itself, "science and religion" involves an almost limitless scope. Creating a Torrance-related science and religion collection provides a distinctive and specific focus to build upon our renowned strengths in this area.

The papers of Torrance along with a collection of his books are found in the library of Princeton Theological Seminary. These have a theological focus. Papers relevant to his milieu and working environment remain in Edinburgh University. Neither of these archives meets the need of preserving materials and facilitating research on Torrance regarding his life's work in science and religion and the history and philosophy of science.

A lively academic society — the T. F. Torrance Theological Fellowship, an auxiliary organization of the American Academy of Religion — actively promotes Torrance research. Yet, despite a resurgence of scholarship on Torrance from the standpoint of theology over the last twenty years, his engagement with the natural sciences has thus far received scant attention from historians of science and from others with specific interest in Torrance's own historical context. The complex contexts within which Torrance's ideas developed and spread are yet under-appreciated. Much more remains to be done to place Torrance's engagement with the history and philosophy of science and science and religion in historical context. An academic infra-structure in the form of a dedicated collection will attract scholars and catalyze research.

Both the books and the scholars are already found here for the figures Torrance engaged, from Jean Philoponos (late antiquity) to Duns Scotus (Middle Ages) to Francis Bacon and Isaac Newton (early modern) to James Clerk Maxwell and Albert Einstein (modern), et al. The synergy between all five types of materials mentioned above makes the OU History of Science Collections an appropriate place for such a collection.

As we collect materials to establish the collection, we shall give priority to the Princeton Theological Seminary Library archive, of course, which remains the essential center for Torrance studies given that Torrance was first and foremost a theologian. Yet, as an auxiliary resource, we will complement their excellent work because of our distinctive emphasis on the scientific dimensions and ramifications of the Torrance tradition. Perhaps future opportunities for collaboration between OU, Princeton, Edinburgh, and other institutions might arise with respect to joint grant proposals involving post-doctoral fellowship programs, conferences, and/or digitization projects.

Why T. F. Torrance?

Uniquely among leading theologians of the 20th century, Torrance engaged the natural sciences extensively on several fronts including the history and philosophy of science. After writing *T. F. Torrance: An Intellectual Biography* (1999), Alister McGrath, the Andreas Idreos Professor of Science and Religion at Oxford University, dedicated the first volume of his trilogy *Nature* (2001), *Reality* (2002), and *Theory* (2003) to "Thomas F. Torrance: A Scientific Theologian."

Torrance was born in Chengdu, China, in the province of Sichuan, in 1913, and died in Edinburgh in 2007. In 1950 Torrance became professor of Church History, and later of Christian Dogmatics, in New College, the School of Divinity of the University of Edinburgh. He served as Moderator of the Church of Scotland, its highest honor, in 1976-1977. After receiving the 1978 Templeton Prize for Progress in Science and Religion, Torrance retired from New College in 1979 to pursue independent scholarship on various topics including science and religion.

In theological circles, T. F. Torrance is widely regarded as one of the most significant theologians of the 20th century for two reasons: Torrance became the leading facilitator of the reception of the theology of Karl Barth in the English-speaking world. In addition, Torrance was a leading figure in the 20th-century resurgence of theological work on the Trinity. These were monumental activities in theology.

Yet Torrance was also a major figure in the dialogue between science and religion – which might seem paradoxical given that neither the Trinity nor Barth's theology seem at first glance particularly relevant to the natural sciences. But Torrance wrote many books engaging topics in science and religion, including:

- 1. Space, Time and Incarnation (#1969-262), and
- 2. Space, Time and Resurrection (#1976-331), which examine the Incarnation's implications for space and time.
- 3. Divine Meaning: Studies in Patristic Hermeneutics (#1995-588) goes deeper into some of the same topics.
- 4. *Divine and Contingent Order* (#1998-623) is Torrance's magisterial work on divine freedom and contingent order in nature.
- 5. Transformation and Convergence in the Frame of Knowledge: Explorations in the Interrelations of Scientific and Theological Enterprise (#1984-433) contains many important essays related to science and religion.

- 6. *Theological Science* (#1969-263) is his magisterial work in the philosophy of science and theology.
- 7. The Ground and Grammar of Theology (#1980-369) originated as popular lectures, and so may be read as a relatively accessible general overview.
- 8. *God and Rationality*; <u>#1971-290</u>.
- 9. Christian Theology and Scientific Culture; #1980-368.
- 10. Reality and Evangelical Theology: The Realism of Christian Revelation; #1982-397.
- 11. Reality and Scientific Theology; #1985-450.
- 12. The Christian Frame of Mind: Reason, Order, and Openness in Theology and Natural Science; #1989-505.
- 13. Preaching Christ Today: The Gospel and Scientific Thinking; #1994-571.
- 14. Theological and Natural Science; #2002-TFT-3.

The first seven books comprise an essential introduction to Torrance's views on science and religion. In addition, there are miscellaneous items including book reviews, collaborations with other authors in various publication endeavors, and articles not republished elsewhere such as "Intuitive and Abstractive Knowledge from Duns Scotus to John Calvin" (#1968-258), as well as books edited by Torrance such as:

- 1. Belief in Science and in Christian Life: The Relevance of Michael Polanyi's Thought for Christian Faith and Life; #1980-370.
- 2. An edition of James Clerk Maxwell, *The Dynamical Theory of the Electromagnetic Field*, to which Torrance added a significant introduction; #1982-399.

Torrance received the Templeton Prize (the "Nobel Prize" for science and religion), and was active in two relevant academic societies: the Académe Internationale des Sciences Religeuses from 1969, and the Académe Internationale de Philosophie des Sciences from 1976. He served as president of the former from 1972-1981. Torrance was involved in the prestigious Gifford Lectures on natural theology and edited two series of publications related to theology and science: "Theology and Scientific Culture" and "Theology and Science at the Frontiers of Knowledge." He was a member of the British Academy and a Fellow of the Royal Society of Edinburgh.

Michael Polanyi was one of the most significant philosophers of science of the 20th century. The text of a recent acclaimed study of Polanyi's intellectual context and influence, written by a past president of the History of Science Society, fails to mention Torrance. Yet Torrance wrote several articles and edited a book about Polanyi's work. Polanyi and Torrance were personal friends who mutually influenced one another and remained in dialogue from the 1960's to the end of their lives. At the end of his life, Polanyi entrusted his papers to Torrance for safe-keeping, making Torrance executor of his literary estate. The relative invisibility of Torrance to historians of science will be addressed by the establishment of this collection.

- For additional information and an online version of this document with clickable links see: https://tftorrance.org/2022-ou-1
- Call for papers: forthcoming issues of *Participatio* on Torrance and the natural sciences: https://tftorrance.org/cfp-sciences