

Theology of Nature

Course Number: TH50

Institution: Pittsburgh Theological Seminary

Instructor: Ronald Cole-Turner

COURSE DESCRIPTION

SUMMARY

The theme of nature plays a role in nearly every doctrine of Christian theology, from creation to incarnation to human redemption to eschatology. When these doctrines were developed by theologians in the patristic or reformation eras, they drew liberally upon the then-current understandings of nature. Sometimes mythic, often philosophical, occasionally empirical, these views of nature were integrated with the core convictions of the Christian faith, among them that the fullest possible meaning of creation is found in its relationship to God. From the earliest stage, Christian theology recognized itself as the supremely integrative discipline. And while traditional theologians always went far beyond those secular understandings by adding rich theological insight into the human condition or into the relationship between nature and God, nevertheless their theological proposals are always limited by the general understanding of their times.

These understandings of nature upon which classic theologians drew for insight have now been thoroughly challenged and revised. Furthermore, our views of nature undergo continuous reinterpretation as the natural sciences continue to yield new insight. It is therefore possible, indeed, necessary, for theologians to reconsider and reformulate traditional doctrines in light of these emerging understandings that arise from the natural sciences. TH50 will attempt to do just that, in a manner appropriate for the vocation of parish clergy.

GOALS

The goals of the course will be for students

- (1) to arrive at a theological understanding of nature that is richly and broadly informed by the natural sciences, and
- (2) to develop and use a theological method that makes constructive use of the emerging insights of science, in the hope that this will become their lifelong practice.

COURSE ASSIGNMENTS

1. Readings as assigned and participation in the class discussion.
2. Three brief quizzes on the required readings. Ten points each.

3. A paper on some aspect of Christian doctrine, with attention to how the doctrine is challenged and might be revised in light of recent developments in the natural sciences. See appendix for further instructions. Due at the paper due date at the end of the term. 15 pages double spaced. 70 points.

REQUIRED READINGS

TEXTS:

John Polkinghorne, *The Faith of a Physicist*.
Arthur R. Peacocke, *Theology for a Scientific Age*.

ADDITIONAL REQUIRED READING (ON RESERVE):

Ian Barbour, *Religion in an Age of Science*, ch. 1 and 5.
Malcolm Jeeves, *Human Nature at the Millennium : Reflections on the Integration of Psychology and Christianity*, ch. 5-6.
Peter Kramer, *Listening to Prozac*, ch. 1-2.
Robert J. Russell, "Does 'The God Who Acts' Really Act?", *Theology Today* 54 (1997).

RECOMMENDED (ON RESERVE):

Augustine, (in Writings against the Pelagians, NPNF v. 5): *On the Merits and Forgiveness of Sins* (Bk 1-2); *On the Grace of Christ, and on Original Sin* (Bk. 1); *City of God*, Bks. 11-14.
Calvin, *Institutes*, on various doctrines.
Niels Gregersen and W. van Huyssteen (ed), *Rethinking Theology and Science: Six Epistemological Models for the Current Dialogue* (forthcoming 1998, Eerdmans); introduction ch. 1, 5, 6.
Gregory of Nyssa, *On the Soul and Immortality*.
Philip Hefner, "The Creation," in *Christian Dogmatics*, vol. 1.
R. Niebuhr, *The Nature and Destiny of Man*.
Wolfhart Pannenberg, *Systematic Theology* vol. 2.
Schleiermacher (*The Christian Faith*, selections on human nature, fall)
Robert J. Russell et al., ed., *Quantum Cosmology and the Laws of Nature: Scientific Perspectives on Divine Action*; and *Chaos and Complexity: Scientific Perspectives on Divine Action (Scientific Perspectives on Divine Action, Vol 2)*.
M. Worthing, *God, Creation and Contemporary Physics*.

COURSE SCHEDULE

***Week 1* INTRODUCTION.**

Overview of the course. Historical Background. The role of cosmologies, philosophies of nature, and early science in the formation of theological doctrines, as early as the biblical texts and throughout the formative patristic era. The position of the Reformers, especially

Calvin (in light of the traditions of this seminary), regarding the science and their role in the construction of doctrine. The rise of modern science and the growing separation between science and theology; with counter-examples noted. The reasons for mid-20th century divorce between science and theology. Late-20th Century steps toward reconciliation, and an introduction to such figures as I. Barbour, J. Polkinghorne, A. R. Peacocke, and R. Russell.

***Week 2* WAYS OF RELATING SCIENCE AND THEOLOGY.**

Various ways of relating science and theology will be considered (Barbour). We will explore the question of theological method, reviewing the proposal that theology be understood as “mutually critical correlation” (D. Tracy) between tradition and contemporary experience, including especially the natural sciences. Why should theology be open to learning from the sciences? What normative or authoritative role, if any, should science play in theology? How should this be brought into correlation with other normative sources, such as scripture or the credal tradition? How should substantive disagreements between contemporary science and theological tradition be resolved? What does theology have to say to science or to its methods?

Readings:

Barbour, ch. 1.

Polkinghorne, introduction, ch. 2.

Peacocke, introduction.

Recommended:

Gregersen and van Huyssteen.

***Week 3* THE ORIGIN OF THE UNIVERSE.**

Contemporary cosmology and the problem of the origin of the universe. Readings: I. Barbour, P. Davies, J. Polkinghorne, A. R. Peacocke, R. Russell, M. Worthing. The doctrine of *creatio ex nihilo* (Augustine, Aquinas, Barth, Pannenberg) and its relationship to big bang cosmology. The various forms of the anthropic principle and their bearing on the argument from design. What is the relationship between creation and the physical universe (understood here as that which can be studied by science)? Is there more to creation (such as angels or souls) that are inaccessible in principle to science because they are metaphysically distinct from the physical universe, even though they are creatures and thus not divine? **Focus question:** How are Big Bang cosmology and *creatio ex nihilo* related?

Readings:

Barbour, ch. 5

Peacocke, pp 27-43

Polkinghorne, ch. 4.

Recommended:

Worthing.
Pannenberg, ch. 7.

Week 4 SELF-ORGANIZATION, CHANCE, DIVINE ACTION.

This session will review the responses made by Polkinghorne, Peacocke, Russell, and others, to the challenge posed by J. Monod regarding chance and divine action. The implications for the debate over divine action will be traced out for various areas of theological doctrine, from creation, evolution, and humanity to redemption. In addition, we will consider the traditional doctrine of the fall, asking whether this doctrine permits or needs a contemporary restatement. This will lay the groundwork for sessions 8-10. Brief quiz on readings to date.

Readings:

Russell, "Does 'The God Who Acts' Really Act?"
Polkinghorne, ch. 3.
Peacocke, pp. 99-187.

Recommended:

Barbour, ch. 6.
Two volumes ed. by Russell.

Week 5 HUMAN NATURE, I.

Philosophical and traditional theological forms of dualism of body and soul (Gregory of Nyssa, Augustine, Calvin). Dualism in early modern science (Descartes). We will explore the relationship between the traditional Jewish and Christian view that human beings are a psychosomatic unity and the critique of dualism that emerges from contemporary science, especially behavior genetics and neuroscience. The problem of reductionism will be noted and various counter-proposals (eg. P. Hefner, R. Peacocke, M. Jeeves, N. Murphy) will be considered. **Focus questions:** 1. Is the proposal of "non-reductive physicalism" (Murphy) appropriate in light of the theological tradition (psychosomatic unity) *and* contemporary science? 2. What implications might this have for pastoral ministry, for the "*cure of souls*"?

Readings:

Polkinghorne, ch. 1.
Peacocke, pp. 72-80, 213-254.

Week 6 HUMAN NATURE, II.

A continuation of the topic of human nature with attention to the doctrine of the fall and original sin. Theological interpretations of human nature and fall (Irenaeus, Augustine, Calvin, R. Niebuhr) will be reviewed. The evolutionary origins of humanity and human nature will be considered, as well as the similarities and differences between human

beings and other species. **Focus question:** In light of our evolutionary origins, what sense does it make to say we are fallen creatures who need redemption?

Recommended:

Augustine, Anti-Pelagian writings.
Jeeves.

***Week 7* INCARNATION AND ANTHROPOLOGY.**

A critical examination of the anthropological assumptions used in traditional Christology, especially in the doctrine contained in the creed of Chalcedon that Jesus Christ fully shares both the divine and the human nature. Attention will be given to the idea of the “virgin birth” and to its mythic misinterpretations (eg. that Jesus was a demigod with human and divine DNA). Attention will be given to the ways in which anthropological dualism con-founds the Christological problem, and we will consider whether advances in theological anthropology (permitted in large measure by advances in scientific understandings of humanity) will make it possible for Christian theology to make progress in Christology. **Focus question:** What light does science shed on a Christian understanding of the humanity of Jesus Christ, and does this help us understand the meaning of the claim that Christ is divine?

Readings:

Peacocke, pp. 261-311.
Polkinghorne, ch. 5-7.

Recommended:

Pannenberg, ch. 9
Brief quiz on readings, weeks 5-7.

***Week 8* HUMAN REDEMPTION.**

In light of what we now understand about human origins and human nature, what does it mean to confess that Jesus Christ is the Savior of humanity? We will consider the challenges posed by evolution (human origins, human uniqueness), genetics (human diversity), and neuroscience (the location of spiritual states in the neural substrate, and the ways in which this can be manipulated by psychopharmacology). In particular we will challenge the typically disembodied approach to the meaning of redemption that is prevalent in the church.

Readings:

Peacocke, pp. 312-346.
Kramer, ch. 1-2.

***Week 9* THE COSMIC SCOPE OF REDEMPTION.**

A critical assessment of the dualism presupposed by most traditional and modern theological views of redemption. Most often, redemption is confined in two ways: It is limited to human beings and further confined to souls to the exclusion of bodies or of human organic nature. Thus the doctrine is usually expounded entirely within the scope of human psychology, culture, or history. We will consider whether the scope of the doctrine needs to be cosmic so as to include “the transfiguration of all things” (Moltmann), within which humanity is then located as a very small but significant part. But if so, what insight might science shed upon the enigmatic question of the future of nature? **Focus question:** Can human beings have a future existence apart from nature?

Recommended:

Pannenberg, ch. 11.

Week 10 IMMORTALITY, RESURRECTION, AND THE FUTURE OF NATURE.

The traditional Christian doctrine of resurrection (as significantly distinct from immortality) will be reviewed and explored in relation to its problems and counter-proposals. What light does contemporary cosmology shed on eschatology or the doctrine of the last things? We will consider the “physics of immortality” proposal of F. Tipler and its criticisms. What options are there for eschatology? Must eschatology inevitably resort dualism of a sort, in that it affirms that only information will survive the end of this universe? Does a more robust eschatology require belief in an-as-yet outstanding work of God in transforming the nature of nature or in allowing a momentous next stage in cosmic evolution (comparable to the emergence of life) to emerge in the future? **Focus question:** In 100 billion years, who or what will I be?

Readings:

Polkinghorne, ch. 9.

Recommended:

Augustine, City of God.

Brief quiz on readings, weeks 8-10.

APPENDIX

INSTRUCTIONS FOR THE MAJOR PAPER

1. Selection of topics. You are free to choose the topic. Ordinarily they will be on some point of traditional Christian doctrine. Topics must be selected by week 3.
2. Outline and reading list. By week 5, you must submit an outline and a reading list. 10 points. No late submissions.
3. You may consult with me at any time about your paper. I will be happy to review drafts and offer advice. You are also encouraged to work together and to discuss your ideas with anyone. You may ask others to review what you have written. All writing and all revisions, of course, must be your own.
4. Each paper must explore the relationship between the chosen doctrine and recent developments in the natural sciences. By recent I mean, for the most part, late

twentieth century, although of course Darwinian evolution and some aspects of contemporary physics date from an earlier period and can be used. In the paper, you should be explicit about your theological method. How does science bear upon theology?

5. Furthermore, you must attempt some integration between theology and the relevant science. You may state that you disagree with your own integrative proposals (if so, please say why), but it is not an option for you simply to say that the science bears no relationship to theological doctrines.