Science, Technology, Religion:
Building and knowing in secular cultures and in cultures of faith

HSci 8950
Seminar, Fall 2013
Wednesdays, 3:35 - 5:30 p.m., Shepherd Labs 127
3 credit hours

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Overview

Many observers have been stunned by the rise of religious fundamentalisms in highly advanced cultures, because people often assume that advanced scientific and technological cultures are secular. This seminar asks whether this assumption is true, by asking how science, technology, and religion have interacted, empirically and historically. Scholars have focused on science and religion for generations, but very few have investigated technology and religion, and yet technology seems to be one thing that crosses cultural boundaries with ease.

The seminar opens with an analysis of the concept of secularity, and then asks if we can identify secular societies in a time of globalization, by surveying interactions between science and technology and the great world religions. We read work by Charles Taylor on secular societies, George Saliba on Islam and European science and technology, Noah Efron on Judaism and science, and Donald Lopez on Buddhism, science, and epistemology. The literature is most developed on science and Christianity, and we read the debate between Richard Dawkins and David Bentley Hart on the role of Christianity in scientific development, recent reappraisals by a variety of scholars of perennial myths of warfare between Christianity and science (such as Galileo’s dispute with the Catholic Church), and Peter Harrison on the role of theology in early scientific practices. We then turn to David F. Noble’s study of Christianity and technology, and ask why scholars have paid so little attention to religion and technology. The seminar concentrates on the early modern and the late modern/industrial periods.

Format

The seminar is a readings and discussion course, and students are expected to attend and participate in the weekly discussions. Discussion is worth 40% of the course grade.

Weekly Reports

Each student will prepare and pre-circulate a one-page report on the readings for each week. In addition, each student will lead three of the weekly discussions, by giving an overview of the
reading and by posing questions to begin discussion. We will assign weeks at the first seminar meeting. Weekly reports are worth 20% of the course grade.

**Term paper**

Each student will write a term paper of approximately 12-15 pages addressing these two questions: Using materials assigned in the course, how would you characterize the history, or histories, of science, technology, and religion? What questions might you pose to direct future scholarly work? Please note that these questions do not ask you to characterize the existing literature, but to characterize the subjects of that literature.

Two drafts of the paper must be turned in. The first draft is due in class on Wednesday, October 16, and must be five pages long. The second draft is due in class on Wednesday, November 20, and must be ten pages long. The final paper is due via email or in the instructor’s mailbox on Wednesday, December 18. The term paper is worth 40% of the course grade.

**Grading**

Grading will be based on participation in discussion (40%), weekly reports (20%), and term paper (40%). Please note that students may not pass the course without completing all assignments, and that a grade of incomplete (I) will be given only if a student has already satisfactorily completed the majority of the coursework and if there is a compelling and emergency reason.

**Schedule of readings and discussions**

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<tr>
<th>Week I, Sept. 4</th>
<th><strong>Who we are and why we are here</strong></th>
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<td>Getting acquainted with our subject and with each other.</td>
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<th>Week II, Sept. 11</th>
<th><strong>Let’s start with narrative! Historical interactions between science and religion</strong></th>
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<th>Week III, Sept. 18</th>
<th><strong>An atheist’s case (a secularist’s case?): Richard Dawkins</strong></th>
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<td>For discussion this week, please read Richard Dawkins, <em>God Delusions</em>, and Michael Ruse, “Atheism, naturalism, and science:</td>
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three in one?” from the Harrison volume, *Cambridge Companion to Science and Religion*.

Please also begin reading Taylor, *Secular Age*, “Introduction” and “Part I: The Work of Reform”.

Week IV, Sept. 25

**A historian’s response: David Bentley Hart**

For discussion this week, please read Hart, *Atheist Delusions*.

Please also continue reading Taylor, *Secular Age*, “Introduction” and “Part I: The Work of Reform”.

Week V, Oct. 2

**What is secularity?**

For discussion this week, please read Charles Taylor, *Secular Age*, “Introduction” and “Part I: The Work of Reform”.

Week VI, Oct. 9 (SHOT)

**Where did religion go?**

For discussion this week, if we are able to reschedule our meeting, please read Taylor, *Secular Age*, “Part II: The Turning Point”.

Week VII, Oct. 16

**Had technology anything to do with religion?**


First term paper draft is due, in class.

Week VIII, Oct. 23

**Judaism and science: different historical interactions?**

For discussion this week, please read Noah J. Efron, *Judaism and Science: A Historical Introduction*. I recommend reading the conclusion first.

Week IX, Oct. 30

**Buddhism and science: a particular view of nature?**

For discussion this week, please read Donald S. Lopez, Jr., *Buddhism and Science: A Guide for the Perplexed*.
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<th>Week, Nov. 6</th>
<th>Islam, science, technology: diverse religious sources for the scientific and technological tradition</th>
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<td>For discussion this week, please read George Saliba, <em>Islamic Science &amp; the Making of the European Renaissance</em>.</td>
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<th>Week, Nov. 13</th>
<th>Religion and the scientific revolution</th>
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<td>For discussion this week, please read Peter Harrision, <em>The Fall of Man and the Foundations of Science</em>.</td>
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<th>Week, Nov. 20</th>
<th>Beliefs: moving into the modern age</th>
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<td>For discussion this week, please read Taylor, <em>Secular Age</em>, parts III and IV, “The Nova Effect,” and “Narratives of Secularization”.</td>
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<td>Second term paper draft is due, in class.</td>
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<th>Week, Nov. 27 (Thanksgiving week)</th>
<th>The mind and the maker: artificial intelligence, psychology, and religious belief</th>
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<th>Week, Dec. 4</th>
<th>Where next?</th>
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<th>Week, Dec. 11</th>
<th>Generating questions, concluding remarks</th>
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<td>Please come prepared to offer some questions that might guide further work on science, technology, and religion.</td>
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<td>Term paper is due to the instructor on Wednesday, Dec. 18.</td>
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Books

With two exceptions, these books are available in the University Bookstore. Peter Harrison, *The Fall of Man and the Foundations of Science*, is available as an e-book from the University Libraries. Noreen Herzfeld, *In Our Image: Artificial Intelligence and the Human Spirit* is readily available on-line.


Book order

ISBN-10: 0674026764

ISBN-10: 0140279164

ISBN-10: 0521712513

ISBN-10: 0313330530

ISBN 10: 0262516152

ISBN-10: 0226493199

ISBN-10: 0618918248

ISBN-10: 0300164297