

Hist 207: Science, Technology and the Politics of Cold War Europe
Spring 2012
Department of History
Oberlin College



Tuesday and Thursday, 1.30-2.50, King 237

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Office Hours: Wednesday, 2-4 pm and by appointment

COURSE DESCRIPTION

This course focuses on the developments in science and technology in Europe during the Cold War with an eye to explore how scientific and technical training became a crucial strategy for waging politics at regional and global scales. Viewed as pivotal yardsticks of a society's modernization, developments in science and technology represented key criteria against which the US and the USSR continuously assessed each other in their struggle for world domination. Politicians, scientists, and educators on both sides of the Iron Curtain strongly believed in the power of technology to win ideological battles between East and West; consequently, both world powers dedicated significant attention to the creation of "standing armies" of scientists and engineers.

The course examines not only the impact of "big" technology, such as the ominous image of the bomb and the nuclear weapons, on the culture and societies of post-1945 Europe, but also that of consumer goods, prefabricated buildings, and even kitchens. For instance, we will discuss the role of technical artifacts and consumer goods in the propaganda war and the ideal futures that they were to represent.

We will also analyze the transatlantic relationship between the US and Western Europe in the aftermaths of the Second World War, and the ways in which it subsequently changed during the 1960s and the 1970s, within a series of broader shifts in global politics. These shifts accompanied an increasingly curious gaze of the Western world upon the economic and social developments in the socialist bloc, and a reciprocal fascination of the socialist subjects with the capitalist forms of modernity. By exploring how technological artifacts and scientific data have been used as pivotal mechanisms to mediate power relations during and after the Cold War, we will thus better understand not only the diverging trajectories of post-1945 Western and Eastern Europe, but also the essential junctures between the two regions.

COURSE OBJECTIVES

- To understand how political and institutional factors influence the development of technology, and how, in turn, technology could become an instrument of power
- To understand the interplay between the material dimension and the social/political/cultural value of technological systems; how socially valued technology could further epitomize, reproduce and reinforce forms of domination and political hierarchies, at regional and global level
- To understand the particular circumstances in which global political actors endorsed a new imaginary of the world – the world divided by the Iron Curtain – in the aftermaths of the Second World War, and the pivotal role that technology played in that endorsement

- To approach the study of the post-1945 European history from an interdisciplinary perspective, which puts the historiography of the Cold War in dialogue with studies of material culture, broadly defined, ranging from design history and the history of urban planning and architecture, to analyses of film and other visual representations

GRADE BREAKDOWN

Weekly response papers (10 total): **20%**

Class participation: **20%**

The first paper: **30%**

The second paper: **30%**

COURSE REQUIREMENTS

1. Weekly response papers (~500 words):

You will submit **10** weekly response papers, spaced over the course of the semester. The response papers must focus on the readings assigned for a specific class.

The written responses are due by **noon** the day **before** the class. (That is, you will submit your response by noon on Monday for the class that meets on Tuesday, or by noon on Wednesday for the Thursday class.)

The response papers will address some key issues of the class readings by raising possible questions for class discussion; engaging with the main concepts and interpreting them; connecting the subject to other themes that had previously been discussed in the class, or other readings, not included in the class material. While I expect the papers to be edited, well-written pieces of work, I encourage you to not be afraid to make challenging statements, raise difficult questions, connect the dots in unusual ways, make unexpected analogies, come up with creative answers, and even experiment with alternative forms of writing. (For instance, you could link the readings to other themes or stylistic genres, such as paintings, poems, newspaper excerpts, etc, to discuss how the latter offer a new take on the assigned texts. As long as your enterprise adds new interpretation to the particular class topic and enriches the discussion, I am flexible about the stylistic form of the response papers.)

The first goal of the weekly responses is for you to find your own analytical voice. The best way to clarify your thoughts is for you to put them in a written form so as to make them accessible to the other members of the class. The second goal is for you to discover that continuous, systematic writing often contains in itself the answers that you seem not to be able to find before you set down and start typing. Writing offers a unique form of intellectual and emotional growth, an access to knowledge and learning as self-

knowledge. Last but not least, the third goal of the weekly papers is to prompt a carefully thought-out and structured discussion.

By the end of the course, you will have submitted **10** response papers, which stand for **20 % of the final grade**.

2. Discussion

Your constant participation in the class discussion is crucial for the success of the seminar. I strongly recommend that you bring a printed copy of your response papers to the class; this will help you remember your thoughts/ideas on the readings, and restate them in the class. Be open-minded; allow others to hold opinions different from yours; be courteous; support your statements by identifying and analyzing concepts, methodologies, political stands, assumptions, and other elements of the readings. Knowing how to listen is as valuable as learning how to argue.

Excellent class participation entails the following characteristics: original contributions, ability to tie observations to those of other discussants, care to link ideas to the readings in specific detail, as well as a continuous endeavor to seek and point out the conceptual implications of the readings.

20% of your final grade will depend on your ability to contribute regularly and substantially to the discussion.

3. Papers

Midterm paper. Due March 21, 2013. (in class)

Final paper. Due May 7, 2013. (in class)

Pick a theme that captures your interest and write about it, by drawing on the class readings, as well as other sources that you would like to explore further. For instance, for your midterm paper, you could choose to write about the imagery of the Cold War, the culture formed around “the Bomb,” the “soft power” of consumption as a political tool, or the role of urban planning and architecture in the endorsement of capitalist or socialist forms of modernity. For the final paper, you will consider one of the themes outlined in the second half of the class.

You may also want to develop an analysis of the visual materials used in the class (such as, film), and set it in dialogue with the assigned readings.

Papers should be approximately 7-9 pages. (I will stop reading at the end of page 10.) Please come to talk to me about the topic of your choice, so we can brainstorm together about possible ways for you to structure your ideas, and develop an original and persuasive argument.

Also, if you would like to offer a short (10 min) presentation of your paper and findings in class, please let me know ahead of time.

ADDITIONAL GROUND RULES

1. Please allow enough time to write well-thought papers and submit them by the deadline. With the exception of extraordinary circumstances, I will take off 1/3 of a letter grade for every 24 hours a paper is overdue.
2. Papers will be one and a half- or double-spaced, and will use a 12-point font.
3. More than two absences will directly impact your final grade. If you are absent more than four times during the semester, you will not pass the class (again, with the exception of extraordinary events).
4. You must sign the Honor Code pledge: "I affirm that I have adhered to the Honor Code in this assignment." Every written assignment turned in for the class must be your own work.
5. If you have specific physical, psychiatric or learning disabilities and require accommodations, please let me know early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to Jane Boomer in the Office of Disability Services in Peters G-27/G-28.

CLASS MATERIALS

I. READINGS

The following book has been placed on the Library Reserves list and ordered through the Oberlin Bookstore for purchase:

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012.

All of the other readings will be available as pdf-s on the Blackboard at least a week before the class for which they have been assigned.

II. FILMS

The following films have been placed on the Reserve list at MUDD library. They must be watched **before** the class.

In the weekly response papers and during the seminar discussion, you will seek to integrate the audio-visual material into the broader theme of the specific class, and place the readings and films in a common conceptual framework.

Dr. Strangelove, Or: How I Learned to Stop Worrying and Love the Bomb, by Stanley Kubrick, 1964.

A USAF general launches a nuclear attack on Russia. When it can't be recalled, and destruction is inevitable, all concerned sit back and wait for the destruction of the world

The Architects [Die Architekten], produced by Herbert Ehler; directed by Peter Kahane; written by Peter Kahane, Thomas Knauf. New York: First-Run Features, 2005 (1990).

A young architect in East Berlin pays a personal and professional price when he is hired to design a small city on the outskirts of Berlin

The Undersea World of Jacques Cousteau, 1977, 60 min.

Explorations of Captain Jacques Cousteau and the crew of the Calypso, in search of the largest most intelligent inhabitants of the sea: the whales.

Star Wars. Episode IV: A New Hope, written and directed by George Lucas ; produced by Gary Kurtz, 2006 (1977).

COURSE SCHEDULE

Week 1

Class 1 (02/05) Introduction

Class 1 (02/07).

What happened before the Cold War? Technology and modernity

Week 2

Origins of the Cold War

Tuesday, 02/12

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 176-190, and 206-215.

Martin Sherwin. "The Atomic Bomb and the Origins of the Cold War." In *Origins of the Cold War: An International History* edited by Melvyn P. Leffler and David S. Painter, 58-71. New York: Routledge, 2005 (1973).

Loren Graham, "The Communism Problem in Farmersburg," and "Technological Competition and the Cold War." In *Moscow Stories*, Bloomington: Indiana University Press, 2006. Pp.3-21.

Thursday, 02/14

David Reynolds. "The European Dimension of the Cold War." In *Origins of the Cold War: An International History*, edited by Melvyn P. Leffler and David S. Painter, 167-77. New York: Routledge, 2005 (1990).

Charles Maier. "Hegemony and Autonomy within the Western Alliance." In *Origins of the Cold*

War: An International History edited by Melvyn P. Leffler and David S. Painter, 221-36. New York: Routledge, 2005 (1989).

Week 3

The Bomb: the nuclear arms race

Tuesday, 02/19

Film (to be watched before the class)

Dr. Strangelove, Or: How I Learned to Stop Worrying and Love the Bomb, by Stanley Kubrick, 1964.

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 215-221.

Thursday, 02/21

David Holloway. "Stalin and the Bomb." In *Origins of the Cold War: An International History*, edited by Melvyn P. Leffler and David S. Painter, 72-90. New York: Routledge, 2005 (1994).

_____. "The Hydrogen Bomb." In *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939-1956*, New Haven: Yale University Press. Pp. 294-319.

Week 4

Politics of knowledge – and of dividing the world. Modernization theory and centralized economic planning.

Tuesday, 02/26

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 221-229.

Michael Latham. "Modernization, International History, and the Cold War World." In *Staging Growth: Modernization, Development, and the Global Cold War*, edited by David C. Engerman, 1-24. Amherst: University of Massachusetts Press, 2003.

Thursday, 02/28

Nils Gilman. "Modernization Theory: The Highest Stage of American Intellectual History." In *Staging Growth: Modernization, Development, and the Global Cold War* Amherst, edited by David Engerman, 47-80. Amherst: University of Massachusetts, 2003.

Martha Lampland. "The Technopolitical Lineage of State Planning in Hungary, 1930–1956." In *Entangled Geographies: Empire and Technologies in the Global Cold War*, edited by Gabrielle Hecht, 155-84. Cambridge, MA: The MIT Press, 2011.

Week 5

Universities and empires. Making science, redefining politics.

Tuesday, 03/05

David Engerman. *Know Your Enemy: The Rise and Fall of America's Soviet Experts*. Oxford: Oxford University Press, 2009. Pp. 36-70 (the last pages of Chapter 1, and Chapter 2)

Christopher Simpson. "Universities, Empire, and the Production of Knowledge: An Introduction." In *Universities and Empire*, edited by Christopher Simpson, xi-xxiv (9-24). New York: New Press, 1998.

Supplementary reading:

Allan A. Needell. "Project Troy and the Cold War Annexation of the Social Sciences." In *Universities and Empire*, edited by Christopher Simpson, 3-26. New York: New Press, 1998.

Thursday, 03/07

Paul R. Josephson. *New Atlantis Revisited: Akademgorodok, the Siberian City of Science*. Princeton: Princeton University Press, 1997. Chapter 1, pp. 3-32.

Loren Graham. "Is Science a Social Construction?" and "Are Science and Technology Westernizing Influences?" In *What Have We Learned About Science and Technology From the Russian Experience?* Stanford: Stanford University Press. Pp. 1-51.

_____. "The Meaning of Science in Russia," and "Spies and Scholars." In *Moscow Stories*. Pp. 103-113, and 200-220.

Supplementary reading:

John Connely. *The Foundations of Diversity: Communist Higher Education Policies in Eastern Europe, 1945-1955*. In *Science under Socialism: East Germany in Comparative Perspective*, edited by Kristie Macrakis and Dieter Hoffmann, 125-139. Cambridge: Harvard University Press.

Week 6

Capitalist and socialist modern spaces. Modernization through urban planning.

Tuesday, 03/12

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 244-257.

Mumford, Eric. "CIAM and the Postwar World, 1939-1950." In *The CIAM: Discourse on Architecture, 1928-1960*, edited by Eric Mumford. Cambridge, MA: The MIT Press, 2002.

David Crowley. "Europe Reconstructed, Europe Divided " In *Cold War Modern: Design 1945-1970*, edited by David Crowley and Jane Pavitt, 249-68. London: V&A Publishing, 2008.

Thursday, 03/14

Film (to be watched **before** the class)

The architects [Die Architekten], directed by Peter Kahane, 2005 (1990).

Francesca Rogier. "The Monumentality of Rhetoric: The Will to Rebuild in Postwar Berlin / "

In *Anxious Modernisms: Experimentation in Postwar Architectural Culture* / Edited By edited by Sarah Williams Goldhagen and Réjean Legault, 165-90. Montréal and Cambridge, Mass., M: Canadian Centre for Architecture; MIT Press, 2000.

Week 7

The Soft Power of Consumption (Part I). The Kitchen Debate.

Tuesday, 03/19

Cristina Carbone. "Staging the Kitchen Debate: How Sputnik Got Normalized in the United States" In *Cold War Kitchen: Americanization, Technology, and European Users*, edited by Ruth Oldenziel and Karin Zachmann, 59-81. Cambridge, Massachusetts: The MIT Press, 2009.

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 257-266.

Gyorgy Peteri. "Nylon Curtain: Transnational and Transsystemic Tendencies in the Cultural Life of State-Socialist Russia and East-Central Europe." *Slavonica* 10, no. 2 (2004): 113-22.

Thursday, 03/21

Museum visit.

The first paper is due at the beginning of the class.

David Crowley and Jane Pavitt. "Introduction." In *Cold War Modern: Design 1945-1970*. Edited by David Crowley and Jane Pavitt, 11-25. London: V&A Publishing.

Crowley, David. "Thaw Modern: Design in Eastern Europe after 1956 " In *Cold War Modern: Design 1945-1970*, edited by David Crowley and Jane Pavitt, 129-53. London V&A Publishing, 2008.

"The West-Eastern Garden Egg Chair," by Anneke Bokern, 26 March 2009. (one page!) In *Stylepark: the world of design culture*. News & Stories.
<http://www.stylepark.com/en/news/the-west-eastern-garden-egg-chair/290974>.

Week 8 SPRING BREAK!

Week 9

Into the Cosmos: Cosmonauts vs. Astronauts?

Tuesday, 04/02

The US ambassadors in the outer space: NASA

Robert MacGregor. "Imagining an Aerospace Agency in the Atomic Age." In *Remembering the Space Age*, ed. Steven J. Dick (Washington, DC: NASA SP-2008-4703, 2008), pp. 55-70.

John Krige. "Building Space Capability Through European Regional Collaboration." In

Remembering the Space Age, ed. Steven J. Dick (Washington, DC: NASA SP-2008-4703, 2008), pp.37-53.

Thursday, 04/04

The USSR and the Soviet Cosmonauts

Asif A. Siddiqi. "Introduction: Space Exploration in the Soviet Context." In *Into the Cosmos: Space Exploration and Soviet Culture*, edited by James T. Andrews and Asif A. Siddiqi, 1-14. Pittsburgh, Pa.: University of Pittsburgh Press, 2011.

_____. "Cosmic Contradictions: Popular Enthusiasm and Secrecy in the Soviet Space Program." In *Into the Cosmos*, 47-77.

Slava Gerovitch. "The Human inside a Propaganda Machine: The Public Image and Professional Identity of Soviet Cosmonauts." In *Into the Cosmos*, 77-107.

Week 10

The Soft Power of Consumption (Part II). Culture Wars

Tuesday, 04/09

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 230-244.

Serge Guilbault. *How New York Stole the Idea of Modern Art: Abstract Expressionism, Freedom, and the Cold War*. Translated by Arthur Goldhammer. Chicago: University of Chicago Press, 1983. **Excerpts**.

Thursday, 04/11

Serge Guilbault and Manuel J. Borja-Villel. *Be-Bomb: The Transatlantic War of Images and All That Jazz, 1946-1956*. Barcelona and Madrid: Museu d'Art Contemporani de Barcelona and Museo Nacional Centro de Arte Reina Sofía. **Excerpts**.

Uta G. Poiger. "Rock 'N' Roll, Female Sexuality, and the Cold War Battle over German Identities." *The Journal of Modern History* 68, no. 3 (1996): 577-616.

Week 11

Artificial Intelligence

Tuesday, 04/16

"2001: A Space Odyssey," by Stanley Kubrik (1968)

Edwards, Paul *The Closed World: Computers and the Politics of Discourse in Cold War America*. Cambridge, MA: The MIT Press, 1996. Chapters 2 and 3, pp. 43-111.

Thursday, 04/18

Paul Edwards. *The Closed World: Computers and the Politics of Discourse in Cold War America*. Cambridge, MA: The MIT Press, 1996. Chapter 4, pp. 113-145.

Gerovitch, Slava. *From Newspeak to Cyberspeak: A History of Soviet Cybernetics*. The MIT Press Cambridge, Massachusetts, 2002. Chapter 3, pp.103-151.

Week 12

Nuclear politics in Western and Eastern Europe. Global shifts: the Oil Crisis and environmental anxiety in a nuclear age.

Tuesday, 04/23

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 267-289.

Gabrielle Hecht. "Technology, Politics, and National Identity in France." In *Technologies of Power: Essays in Honor of Thomas Parke Hughes and Agatha Chipley Hughes*, edited by Michael Thad Allen and Gabrielle Hecht, 253-94.

Sonja Schmid. "Nuclear Colonization? Soviet Technopolitics in the Second World." In *Entangled Geographies: Empire and Technologies in the Global Cold War*, edited by Gabrielle Hecht, 125-54. Cambridge, MA: The MIT Press, 2011.

Thursday, 04/25

Film (to be watched before the class)

The Undersea World of Jacques Cousteau (1977), 60 min.

Michael Bess. *The Light-Green Society: Ecology and Technological Modernity in France, 1960-2000*. Chicago: The University of Chicago Press, 2003. Chapter 4.

Week 13

The Beginning of the end: the disintegration of the Soviet bloc. A new global order

Tuesday 04/30

The 1980s in the Soviet bloc

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 291-303.

Katherine Verdery, "What was socialism, and why did it fall?" In *What Was Socialism and What Comes Next?* Pp. 19-38. Princeton: Princeton University Press.

Thursday, 05/02

Nuclear Disasters, or the end of the Soviet Dream

Adriana Petryna. *Life Exposed: Biological Citizens after Chernobyl*. Princeton: Princeton University Press, 2002. Chapter 2.

Richard Rhodes. *Arsenals of Folly: The Making of the Nuclear Arms Race*. New York: Knopf, 2007. Chapter 1.

Week 14

The Second Cold War?

Tuesday, 05/07

The second paper is due in class.

Mary Nolan. *The Transatlantic Century: Europe and America, 1890-2010*. Cambridge: Cambridge University Press, 2012. Pp. 304-330.

Stephen Kotkin. "Reviving the Dream." In *Armageddon Averted: The Soviet Collapse, 1970-2000*, edited by Stephen Kotkin, 31-57, 2001.

Loren Graham, "The Soviet Union and I Collapse Together." In *Moscow Stories*.pp 237-249.

Thursday, 05/09

Film (to be watched before the class)

Star Wars

Richard Rhodes. *Arsenals of Folly: The Making of the Nuclear Arms Race*. New York: Knopf, 2007. Chapter 4.