

Creativity, Innovation and Society
Sociology 214
Spring 2008, Princeton University
Lecture L01: TTh 1:30-2:20pm
Lecture Hall: Aaron Burr Hall (BURRH) 219

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Objective

This course will decode cultures of creativity by examining how society perceives the creative process and defines the norms that encourage (or stifle) creativity. We will also examine, from a sociological point of view, the social processes and consequences of innovation. Under what social conditions could innovation emerge? How do innovations reshape parts of society and culture? The course will not cover every aspect of innovation, but will focus on two related processes: the production of creativity, and its dissemination. Assigned readings are interconnected thematically, serving as tools for students to develop a comparative perspective on the subject. By the conclusion of the course, students should be able to dissect the different social processes that facilitate or constrain opportunities for creativity and innovation. Furthermore, they should be able to articulate a critical definition as to what “innovation” is (or is not).

Readings

All readings can be **downloaded from Blackboard**. We will post weekly readings at least 5 days prior to the lecture. One *separate* piece of reading will be assigned to weekly sessions led by Stephanie Schacht. Please keep up with new postings. In each set of readings, there might be a combination of journal articles and book chapters. More important, a study guide will be provided. The questions on the study guides will appear in examinations.

Requirements

- 1) Read before lectures and precepts.
- 2) Index Cards (4 by 6) (5%)—Prepare a question you have about the lecture or other things you have in mind that is related to the course materials. Write it on an index card (no paper please). King might ask you to speak about your questions during lectures, so do think about why you ask the questions and be prepared to talk about it. Give this card to King prior to the lecture. Late cards won't be accepted, but you will be excused for 5 cards throughout the semester. No need to submit late cards. Index cards won't be graded, but they provide ways for us to evaluate the

progress of each student. The content of the questions can relate to daily required readings or anything that might be of interest to class discussions.

In the second half of the course, there is no need to submit index cards. However, in place of index cards, please submit one TYPED *paragraph* (about 4 to 10 sentences) that describes how the required readings for the day might APPLY to your group project (think of solutions). This will help generate more ideas for your group and your individual projects. Submit the paragraph at every lecture. These paragraphs will be treated as index cards (so they will not be graded, but will be read). Since we don't have a final exam, these paragraphs also intend to keep you reading:

- 3) Precepts (30%)— Separate precept syllabus will provide details.
- 4) Mid-Term exam: (20%)—This exam consists of a series of short questions. No long essays or multiple choices. Exam questions will resemble those in the study guides, and a review session will be held prior to the exam.
- 5) Work Progress reports (15 %)—You are required to write several work progress reports about your group project. Instructions will be distributed.
- 6) Group Project (30%)—This group project requires three to four students to design a webpage that presents an innovative idea to solve a social problem chosen by the group. The group product should reflect certain knowledges they have gained in the course. Several guidelines for the project will be distributed throughout the semester. In addition, individual students will write a reflective report on their collective projects. This individual paper requires a critical evaluation of their group project in relation to what they have learned in the course. Individual report (15%), Group webpage (15%). Each group will meet with King to discuss preliminary ideas and directions two times during the semester.

PART I: THE PRODUCTION OF CREATIVITY

WEEK 1: The History of Genius

Even though we seem know what it is when we see it, the concept of “creativity” is both a historical and social construct. This week we examine various conventional meanings of “creativity.” The first lecture argues that we should see the term “creativity” not as a thing, but as a process through which individuals, or groups of individuals, produce distinguishable effects on their own lives or other people’s lives. In the second lecture, we trace how the historical process that “democratize” human competence of being creative. The result is that creativity is no longer an exclusive property of some geniuses, but a natural right of social agents.

Lecture Readings:

Gerard, Alexander. 1774. Essay on Genius (W. Strahan), pp. 5-14; 27-42; 46-47; 60-65; 71-78.

WEEK 2: The Creative Mind

We will examine creativity in terms of thinking, consciousness, and cognitive processes. Koestler and Dewey theorize the timing of (creative) thinking: When exactly does creative thinking arise? Of course, one cannot really address the issue of timing without having a theory suggesting what creativity and innovation are, and how they come about. Although the unconscious is important in producing Koestler's "moments of truth," he does not quite tell us the origins of the unconscious. Also, what exactly does the unconscious do to the creator? To resolve these questions, we return to Freud, who also argues for a particular view of human nature. We need to figure out how different authors portray human creative life differently.

Lecture Readings:

Koestler, Arthur. 1964. The Act of Creation (Hutchinson), pp. 101-120.

Dewey, John. 1910. How We think (D.C. Heath & Co.), pp. 1-13; 161-167.

Freud, Sigmund. 1916. Wit and Its Relation to the Unconscious (Moffat, Yard & Company), pp.3, 6-7, 9-10, 15-21, 25, 29-35, 48, 128, 138-148, 214-224.

Precept Reading:

Dewey, John. 1917. Democracy and Education: An Introduction to the Philosophy of Education (Macmillan), pp. 138-145; 179-192.

WEEK 3: The Social Structure of Creativity

By now we know that innovations do not usually happen at random. However, the question of the "ripeness" of innovation has remained unanswered in previous readings. What exactly is the motivation for creativity and innovation? And when does—or must—it happen? This week we will pursue some answers by focusing on two kinds of "structures"—social structures and the structure of modern science. We need to figure out how these structures facilitate, determine, produce, or suppress creativity and innovations.

Lecture Readings:

Kuhn, Thomas S. 1962. The Structure of Scientific Revolutions (University of Chicago Press) pp.10-12; 18-20; 23-26; 35-40; 52-56; 66-69; 77-91.

Precept Reading:

Fernández-Kelly and Lisa Konczal. 2005. "'Murdering the Alphabet' Identity and Entrepreneurship among Second-general Cubans, West Indians, and Central Americans." Ethnic and Racial Studies 28(6): 1153-1181.

Merton, Robert K. 1957. "Social Structure and Anomie" in Social Theory and Social Structure (Free Press), pp. 131-157.

WEEK 4: The Ideology of Creativity

Each social world is organized by certain identities, values, rules, traditions, and norms. When people within a field act, their activities sometimes create problems that require the modification, innovation, or revolution of their fields. Changes (innovative or not) can come from within the field's internal dynamics (e.g., in the ways scientific knowledge is structured); at other times, changes can originate from the invasion of one field by another. This week we focus on innovative processes that involve more than one field.

Lecture Readings:

Becker, Howard. 1978. "Arts and Crafts." American Journal of Sociology 83: 862-889.

Collins, Randall. 1998. "Innovation by Opposition: Ancient China," in The Sociology of Philosophies: A Global Theory of Intellectual Change (Harvard University Press), pp. 137-142; 162-168.

Precept Reading:

Groce, Stephen B. 1989. "Occupational Rhetoric and Ideology: A Comparison of Copy and Original Music Performers." Qualitative Sociology 12 (4): 391-410.

WEEK 5: Social Networks and Creativity

Though generated by different mechanisms, the processes of innovation are not purely products of individual talent. Social structures (norms and field boundaries) are important parameters that limit how individuals can innovate. This week we are examining how creative projects are connected to one another, and how the connections of people within one creative project shape the capacity for some people to innovate.

Lecture Readings:

Burt, Ronald. 2004. "Structural Holes and Good Ideas." American Journal of Sociology 110(2): 349-99.

Ruef, Martin. 2002. "Strong Ties, Weak Ties and Islands: Structural and Cultural Predictors of Organizational Innovation." Industrial and Corporate Change 11(3): 427- 449.

Precept: Use precept times to meet with your group members on group projects.

WEEK 6: Social Institution and Creativity

We will examine the various aspects of institutions that enable and constrain creativity. Particularly we will look at how university settings and government control shape innovation. The issue of patenting—a means for controlling and enabling invention—will be highlighted.

Lecture Readings:

Kenney, Martin and W. Richard Goe. 2004. "The Role of Social Embeddedness in Professional Entrepreneurship: A Comparison of Electrical Engineering and Computer Science at UC Berkeley and Stanford." Research Policy 33: 691-707.

Precepts: Meeting with King and Mid-Term Review.

PART II

THE DISSEMINATION OF INNOVATION

In this part of the class, we will examine the "spread" of innovation. Diffusion processes are mechanisms of social change. Time and space are therefore very important in shaping how innovations are transmitted across social groups. How does the adoption of innovation in one space affect another through time? How do social institutions constrain the spread of innovation? How do social networks shape ideas adoption? Given entrenched cultural conventions, at what point can a society adopt new ideas? All these questions are based on the assumption that we cannot understand creativity and innovation *without* also gaining an understanding of how people *copy* and *imitate* each other in the process of diffusion.

WEEK 7 (March 24-28):

Adoption of Innovation

If the creativity of geniuses is defined by their inventiveness and imagination (as Gerard put it), then the adoption of innovations requires an opposite social force: imitation. We begin to move our analyses from the production of innovation to its dissemination. Once an invention or innovative idea emerges, who will adopt it? Are there predictable patterns that can distinguish earlier adopters from later ones? Are different rates of adoption a function of some individual, social, or cultural characteristics?

Lecture Readings:

* Tuesday (March 25) is the date for the mid-term exam.

Tarde, Gabriel. 1903. The Laws of Imitation, translated by Elsie Clews Parsons. (originally published by Henry Holt & Co.); & Selection from Gabriel Tarde on Communication and Social Influence, edited by Terry N. Clark. University of - Chicago Press, pp. 177-191.

Precept: No precepts.

WEEK 8 (March 31-April 4):

Dynamics of Cultural Innovation

We are moving to examine “society” as a system. How do new ideas and concepts become part of our cultural system? We will look at several mechanisms that translate innovation (in the form of ideas) into daily life. Pitirim Sorokin, a fascinating sociologist often with bold claims, posits that three “supersystems”—those of the ideational, idealistic, and sensate—are responsible for cultural shifts. In an analogous but different analysis, a contemporary American sociologist, Stanley Lieberson, suggests that we move beyond seeing innovations as a function of external social forces. We should, instead, look at those mechanisms internal to a cultural system to explain how new ideas spread.

Lecture Readings:

Sorokin, Pitirim A. 1949. Society, Culture, and Personality: Their Structure and Dynamics. Part Seven: The Dynamics of Cultural Processes. New York: Harper & Brothers, pp. 537-545; selection.

Lieberson, Stanley. 2000. A Matter of Taste: How Names, Fashions, and Culture Change. New Haven: Yale University Press. Chapter 4 & 5.

Christensen, Clayton M. 1997. The Innovator’s Dilemma: When New Technologies Cause Great Firm to Fail. Harvard Business School Press. Selection.

Precept Readings:

Best, Joel. 2006. Flavor of the Month: Why Smart People Fall for Fads (University of California Press), pp. 9-39.

WEEK 9 (April 7-11):

Dynamics of Technological Innovation

Technological innovations differ from ideological innovations because new technology often requires changes of other physical and social arrangement. Internet, for example, requires very different physical setup than those of telephone communication (e.g., the requirement of a computer vs. a phone). Furthermore, more than ideological innovations, technological innovations are often constrained by prior innovation. For example, the development of the internet is impossible without the prior development of telephone communication, fiber glass, electricity, computer, etc. This week we will take a look at how technological innovations constrain or enable one another. One of our foci is the idea of “path dependency” of technological development.

Lecture Readings:

David, Paul A. 1985. “Clio and the Economics of QWERTY.” American Economic Review 75(2): 332-337.

Arthur, W. Brian. 1989. "Positive Feedbacks in the Economy." Scientific American 262: 92-99.

Arthur, W. Brian. 1989. "Competing Technologies, Increasing Returns, and Loci-in by Historical Events." Economic Journal 99(394): 116-131.

Liebowitz, S. J. and Stephen E. Margolis. 1990. "The Fable of the Keys." Journal of Law and Economics 33: 1-25.

Precept Readings:

Hargadon, Andrew B. and Yellowless Dogulas. 2001. "When Innovations Meet Institutions: Edison and the Design of the Electric Light." Administrative Science Quarterly 46(3): 476-501.

WEEK 10 (April 14-18):

Diffusing New Ideas in Networks

What are the social network effects in the diffusion process? Which types of social relations are more important in spreading innovations than which other kinds, at what stage of the process do they matter? If the networks of early adopters are small in size and isolated in their location, how is it possible that new ideas can be spread from secluded adopters to a wider network. Or in Duncan Watt's question: how is a cascade possible? This week we will examine the network dynamics of innovation diffusion. We will focus on the idea of cascades and tipping points.

Lecture Readings:

Watts, Duncan J. 2003. Six Degrees: The Science of a Connected Age. New York: W.W. Norton. Chapter 8 & 9.

Galdwell, Malcolm. 1996. "The Tipping Point: Why is the City Suddenly so Much Safer—Could It Be that Crime Really is an Epidemic?." The New Yorker (June 3, 1996)

Thompson, Clive. 2008. "Is the Tipping Point Toast?"
<<http://www.fastcompany.com/magazine/122/is-the-tipping-point-toast.html>>

Precept Readings:

DiMaggio, Paul and Joseph Cohen. 2005. "Information Technology and Network Externalities: A Comparative Study of the Diffusion of Television and the Internet." In Economic Sociology of Capitalism, edited by Victor Nee and Richard Swedberg. Princeton University Press.

WEEK 11 (April 21-25):

Dynamics of Political Innovation

Political change is perhaps the hardest kind of innovation. Political innovators must convince a lot of people that a new political form, usually associated with very high risks, could lead to a better life. These restrictions may have forced political innovators to be much more creative than other kinds of innovators. This week we will take a look at how political challengers construct new kinds of political mobilization and pursue their political goals.

Lecture Readings:

Clemens, Elizabeth. 1997. The People's Lobby: Organizational Innovation and the Rise of the Interest Group Politics in the United States, 1890-1925 (Chicago University Press). Chapter 2 & 3.

Mische, Ann. 2007. Partisan Publics: Communication and Contention Across Brazilian Youth Activist Networks. Princeton University Press. Selection.

Precepts: Group Report on Project Progress (King will be there).

WEEK 12 (April 28-May 2):

New Thinking on Intellectual Properties

Innovators often find that their inventions are out of their control once their inventions are diffused into various domains of society. How do people create a democratically innovative environment? To answer this question, we need to think about intellectual property differently. The question we pursue this week has to do with idea sharing. Is it possible that idea sharing can increase innovation? Can we create a better social environment for innovation?

Lecture Readings

Weber, Steven. 2004. The Success of Open Source (Harvard University Press), pp.1-8; 54-93.

Benkler, Yochai. 2006. The Wealth of Networks: How Social Production Transforms Markets and Freedom. Yale University Press. Selection.

Precept: No precepts.

--End of the course--