

Fridays 11:00 AM–1:50 PM
Social Ecology Rm. 112
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Spring Quarter, 2010
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SOCIAL ECOLOGY 261

STRATEGIES OF THEORY DEVELOPMENT

Overview

One of the major purposes of this course is to encourage you to develop your own theoretical ideas. Typically, graduate curricula in the behavioral and natural sciences emphasize the mastery of hypothesis-testing procedures. The development of methodological skills for testing hypotheses is a crucial goal of graduate education. All too often, however, graduate training gives short shrift to the hypothesis-formation phase of research. A fundamental assumption of this course is that social ecological theory can be enhanced to the extent that students are encouraged to develop their skills as creative theoreticians. Accordingly, this course explicitly emphasizes various strategies for promoting the development of original research ideas. We will approach the development of theory as a process that can be cultivated and enhanced through self-reflection, collegial support, and sustained effort. In effect, we will develop a social ecological model of theorizing that highlights the interplay among psychological, sociocultural, and environmental factors in the formation and refinement of creative research ideas.

The second major objective of this course is to examine key issues and controversies facing the development of social ecological theory. In relation to this goal, we will consider some of the unique challenges that arise when researchers attempt to develop hypotheses and theories spanning multiple disciplines and levels of analysis. We will consider alternative scientific "world views" and contrasting perspectives on the nature and uses of theory. We will discuss several issues relating to the scope of social ecological theories (grand vs. middle-range theorizing; conceptual and methodological reductionism). Also, we will examine some different strategies of theorizing that are suggested by alternative metatheoretical perspectives (e.g., grounded vs. deductive approaches; deviation-counteracting vs. deviation-amplifying versions of systems theory; and transformational theorizing).

Course Requirements

1. Compile a diary/journal relating to the development of your research ideas and your reactions to the readings assigned for each week of the quarter. Each week, you are asked to make a two-paragraph entry in your journal. One paragraph should be devoted to your thoughts about one or more of the required readings for that week.

Your entry should be in response to one or more of the discussion questions that are listed for each week in the attached course calendar, but you are encouraged to address other issues not covered by the discussion questions as well. Your comments on the readings should be no more than one typed (double-spaced) page per week. The second paragraph of your weekly entry should relate to the formation and refinement of your own theoretical ideas during that week. Your comments might focus on any number of issues relating to the development of your research ideas, including the sequence of mental associations by which you arrived at a particular idea; problems you are having in generating and/or refining new ideas; and reflections about the environmental settings and social circumstances in which your ideas first arose. This second portion of your weekly journal entry should be no more than one typed page in length. Thus, by the end of the quarter, you will have developed a journal of approximately 20 typed pages in length. The typed version of your journal is due on Friday, June 4. Prior to that date, you should bring your journals to each class session, to refer to during class discussions.

2. You are expected to prepare two brief (2-3 typed pages) "idea papers" for distribution to seminar participants on the dates listed in the course calendar. The nature of these papers will be described more fully at the first class session. Ideally, the idea papers should be an extension of the thoughts and ideas that you record each week in your journal. Please distribute copies of your idea papers to all class members on the dates noted in the attached course calendar. The first idea paper is due on Friday, April 16, and the second idea paper is due on Friday, May 7.

3. You are expected to prepare a third, longer (5-7 typed pages) idea paper along one of the following lines: (a) develop your own statement of a new theory; (b) develop a novel system or set of dimensions for classifying person-environment or group-environment transactions; (c) discuss a current area of research within social ecology in terms of its theoretical gaps and its potential extensions. Let me know if there are alternative options that you would like to pursue for your third idea paper. Your third idea paper can be developed as an extension of your earlier papers and journal entries, but it does not have to be explicitly related to your earlier projects if you wish to pursue different topics within each of the three papers. The third paper is due on Friday, May 28.

4. Attendance and active participation in each seminar session are expected. Since this is a small seminar, the success of the course depends on participation from each person. The basic categories of participation for each week of the seminar are "positive class participation (+)", "no class participation" (0), or "not present for more than half of the class period" (-). There will be ample opportunities for individual and collective participation through a series of class exercises relating to hypothesis formation, and discussions pertaining to your journal entries on the assigned readings for each week.

Evaluation

Performance of the course requirements will contribute to your grade in the following proportions:

25%	journals
15%	first idea paper
15%	second idea paper
20%	third idea paper
25%	class participation

Texts

There are three recommended texts for the course. All can be purchased at the UCI Bookstore. Also, all texts will be on reserve in Room 202 SE-I (URP Dept. Office).

(1) Adams, J. L. (2001). Conceptual blockbusting: A guide to better ideas. Cambridge, MA: Perseus Publishing (CB) (first published by WW Norton in 1974)

(2) Albert, R. S., Ed. (1992). Genius and eminence: The social psychology of creativity and exceptional achievement. (2nd edition). New York: Pergamon Press (GE)

(3) Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. New York: Aldine (DG)

Also, the following texts are excellent resources for this course:

Amabile, T. M. (1983). The social psychology of creativity. New York: Springer-Verlag.

Dubin, R. (1969). Theory building. New York: Free Press.

Emery, E. F., Ed. (1969). Systems thinking. Middlesex, England: Penguin Books.

Feigl, H., & Broadbeck, M. (1953). Readings in the philosophy of science. New York: Appleton-Century-Crofts.

Gardner, H. (1993). Creating minds. New York: Basic Books.

Lave, C. A., & March, J. G. (1975). An introduction to models in the social sciences. New York: Harper & Row.

Marx, M. H., & Goodson, F. E., Eds. (1976). Theories in Contemporary Psychology. New York: Macmillan, second edition.

Perkins, D. N. (1981). The mind's best work. Cambridge, Ma.: Harvard University Press.

Perkins, D. N. (1986). Knowledge as design. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Simonton, D. K. (1984). Genius, creativity, & leadership: Historiometric inquiries. Cambridge, Ma.: Harvard University Press.

Sternberg, R.J. (1988). The nature of creativity: Contemporary psychological perspectives. New York: Cambridge University Press.

Taylor, I. A., & Getzels, J. W. (1974). Perspectives in creativity. Chicago: Aldine.

Turner, J. H. (1978). The structure of sociological theory. Homewood, IL: The Dorsey Press.

Turner, M. B. (1967). Philosophy and the science of behavior. New York: Appleton-Century-Crofts.

COURSE CALENDAR

Graduate Seminar on Strategies of Theory Development

Section 1. Introduction and Overview

Week 1

Friday
April 2

Why this course? Can Strategies of Theory Development be Taught?

Assignment:

Carr, N. (2008). Is Google making us stupid?
<http://www.theatlantic.com/doc/200807/google>
The Atlantic Online (July/August)

Crovitz, H.F. Recurrence and memory. In H.F. Crovitz (1970). Galton's walk: Methods for the analysis of thinking, intelligence, and creativity. NY: Harper & Row, 23-52.

Levy, L.H. (1968). Originality as role-defined behavior. Journal of Personality and Social Psychology, 9, 72-78.

Sternberg, R.J. (2002). Creativity as a decision. American Psychologist, 57, 376.

Wachtel, P.L. (1980). Investigation and its discontents: Some constraints on progress in psychological research. American Psychologist, 35, 399-408.

Weick, K.E. (1979). The social psychology of organizing. Reading, MA: Addison-Wesley, pp. 252-264.

Wicker, A.W. (1985). Getting out of our conceptual ruts: Strategies for expanding conceptual frameworks. American Psychologist, 40, 1094-1103.

Optional:

Marx, M.H. Theorizing. In M.H. & F.E. Goodson (Eds.), Theories in contemporary psychology.

NY: Macmillan, 1976, 261-286.

Paletz, S.B.F., & Schunn, C.D. (2010). A social-cognitive framework of multidisciplinary team innovation. Topics in Cognitive Science, 2, 73-95.

Discussion Questions:

What factors influence scientists' selection of research topics? Do these factors enhance or distort the scientific process? According to the authors discussed this week, what strategies might be useful for improving the quality of research in the behavioral and natural sciences?

Week 2

**Friday
April 9**

Strategies for Enhancing Creative Theorizing

Assignment:

Adams, CB, 1-81, 103-129.

Gordon, W.J.J. (1974). Some source material in discovery-by-analogy. Journal of Creative Behavior, 8, 239-257.

Leff, H.L. (1984). Creativity aids for imagining improvements and actions. In H. Leff, Playful perception. Burlington, VT: Waterfront Books, 88-99.

Maddi, S. The strenuousness of the creative life. In I.A. Taylor & J.W. Getzels (Eds.), Perspectives in creativity. Chicago: Aldine, 1974, 173-190.

McKim, R.H. Thinking visually: A strategy manual for problem solving. Belmont, CA: Wadsworth, 2-6, 94-100, 127-132, 142-155.

Mills, C.W. On intellectual craftsmanship. In C.W. Mills, The sociological imagination. NY: Oxford University Press, 1959, 195-226.

Optional:

Perkins, D.N. (1981). The mind's best work. Cambridge, MA: Harvard University Press.

Stein, M.I. Stimulating hypothesis formation. In M.I. Stein, Stimulating creativity, Volume 1.

NY: Academic Press, 1974, 194-223.

**Discussion
Questions:**

What alternative conceptions of creativity and creative thinking are reflected in this week's readings? Are the emphases of Maddi and Mills on strenuousness and discipline complementary with those of Adams, Leff, and Gordon on perceptual flexibility? Why or why not?

Section II. Guidelines, Choicepoints, and Dilemmas in the Development of Social Ecological Theories

Idea Paper: ****First Idea Paper Due: Friday April 16****

Week 3

**Friday
April 16**

Disciplines, Paradigms, and Theories

Assignment:

Campbell, D.T. Ethnocentrism of disciplines and the fish-scale model of omniscience, 328-348. In M. Sherif & C. W. Sherif (Eds.), Interdisciplinary relationships in the social sciences. Chicago: Aldine Press, 1969.

Cronbach, L.J. Social inquiry by and for earthlings. In D. Fiske & R. Shweder (Eds.), Metatheory in social science. Chicago: University of Chicago Press, 1986, 83-107.

D'Andrade. Three scientific world views and the covering law model. In D. Fiske & R. Shweder (Eds.), Metatheory in social science. Chicago: University of Chicago Press, 1986, 19-41.

Durkheim, E. The rules of sociological method. NY: The Free Press, 1-46.

Lewin, K. Principles of topological psychology. NY: McGraw-Hill, 1936, 11-13, 18-29.

Rosenfield, P.L. (1992). The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. Social Science and Medicine, 35, 1343-1357.

Shapere, D. (1971). The paradigm concept. Science, 172, 706-709.

Stokols, D. (2006). Toward a science of transdisciplinary action research. American Journal of Community Psychology, 38, 63-77.

Optional:

Kuhn, T. (1970). The structure of scientific revolutions. Chicago: University of Chicago Press.

Lakatos, I., & Musgrave, A., Eds. (1970). Criticism and the growth of knowledge. London: Cambridge University Press.

Stokols, D. (1998). The future of interdisciplinarity in the School of Social Ecology. Paper presented at the Social Ecology Associates Annual Awards Reception, University of California, Irvine. Available at: <http://eee.uci.edu/98f/50990/readings.htm>

Discussion Questions:

By what criteria do Durkheim and Lewin differentiate between the disciplines of psychology and sociology? Are the notions of "distinct scientific disciplines" and "disciplinary boundaries" relevant to the process of theorizing? Why or why not? What factors may facilitate or impair transdisciplinary theorizing and research?

Week 4

**Friday
April 23**

First Group Tutorial Sessions (11:00AM-2:00 PM) to Discuss Idea Paper 1

Week 5

**Friday
April 30**

On the Nature and Uses of Theory: Positivist and Relativist Perspectives; Unidisciplinary and Transdisciplinary Theorizing

Assignment:

Engels, F. Socialism: Utopian and scientific. In K. Marx & F. Engels, Selected Works. NY: International Publishers, 1968, 417-434.

Gergen, K.J. (1978). Toward generative theory. Journal of Personality and Social Psychology, 36, 1344-1360.

Marx, M.H. Formal theory. In M.H. Marx & F.E. Goodson (Eds.), Theories in contemporary psychology. NY: Macmillan, 1976, 234-260.

Platt, J.R. (1964). Strong inference. Science, 146, 347-353.

Weber, M. The Protestant ethic and the spirit of capitalism. NY, Charles Scribner's Sons, 1958, 13-92.

Optional:

Berger, P.L. & Luckmann, T. (1966). The social construction of reality. NY: Doubleday.

Sarbin, T.R. The culture of poverty, social identity, and cognitive outcomes. In V. L. Allen (Ed.), Psychological factors in poverty. Chicago: Markham, 1970, 29-46.

Discussion Questions:

The articles by Gergen, Marx, and Platt suggest rather different criteria for measuring the progress of scientific inquiry. Are the perspectives of these authors compatible or mutually exclusive? What are the key functions of theory according to these authors? What are the major differences in the theoretical accounts of capitalism presented by Engels and Weber?

Idea Paper:

****Second Idea Paper Due: Friday May 7**

Week 6

**Friday
May 7**

Grand vs. Middle-Range Theories in the Behavioral and Social Sciences; Conceptual and Methodological Reductionism

Assignment:

Firey, W. (1945). Sentiment and symbolism as ecological variables. American Sociological Review, 10, 140-148.

Gergen, K.J. (1973). Social psychology as history. Journal of Personality and Social Psychology, 26, 309-320.

Jessor, R. (1958). The problem of reductionism in psychology. Psychological Review, 65, 170-178.

Merton, R.K. (1968). Manifest and latent functions. In R.K. Merton, Social theory and social structure. NY: The Free Press, 113-138.

Merton, R.K. On sociological theories of the middle range. In R.K. Merton, Social theory and social structure. NY: The Free Press, 1968, 39-71.

Sampson, E.E. (1981). Cognitive psychology as ideology. American Psychologist, *36*, 730-743.

Watson, J.B. (1913). Psychology as the behaviorist views it. Psychological Review, *20*, 158-177.

Optional:

Brunswik, E. (1939). The conceptual focus of some psychological systems. Journal of Unified Science, *8*, 36-49.

Cohen, L.E., & Felson, M. (1979). Social change and crime rate trends. American Sociological Review, *44*, 588-608.

Hull, C.L. (1943). The problem of intervening variables in molar behavior theory. Psychological Review, *50*, 273-291

Discussion Questions:

What are some of the alternative functions of grand and middle-range theories? How are the theoretical perspectives of radical behaviorism, historical materialism, and cognitive psychology similar, despite their obvious differences of emphasis on either overt behavior or mental processes?

Week 7

Friday
May 14

Strategies of Theorizing: Grounded Theory vs. Deductive Approaches

Assignment:

Coleman, J. (1988). Social capital in the creation of human capital. American Journal of Sociology, *94* Supplement, S95-S120.

Glaser & Strauss, DG, 1-100, 237-257.

Maslow, A.H. (1943). A theory of human motivation. Psychological Review, 50, 370-396.

Merton, R.K. (1938). Social structure and anomie. American Sociological Review, 3, 672-682.

Spence, K.W. (1944). The nature of theory construction in contemporary psychology. Psychological Review, 51, 47-68.

Tolman, E.E. (1948). Cognitive maps in rats and men. Psychological Review, 55, 189-208.

Wirth, L. (1938). Urbanism as a way of life. The American Journal of Sociology, 44, 1-24.

Optional:

Durkheim, E. (1933). Mechanical and organic solidarity. In The division of labor in society. Trans. by George Simpson. New York: The Free Press, 21, 24-29, 30-37.

Mead, G.H. (1934). Play, the game, and the generalized other. In A. Strauss (Ed.), The social psychology of George Herbert Mead. Chicago, IL: University of Chicago Press, 228-233.

Simmel, G. (1950). The metropolis and mental life. In Sociology of Georg Simmel. Glencoe, IL: The Free Press, 409-424.

Discussion Questions:

How might Spence or Merton reply to the grounded-theory approach advocated by Glaser and Strauss? Do the theoretical statements of Maslow, Merton, and Tolman reflect a grounded theory perspective? Why or why not? Is Spence's emphasis on hypothetical constructs compatible with Glaser & Strauss' grounded-theory approach? Why or why not? Consider a particular substantive problem in which you are currently interested. In developing a theoretical analysis of that problem, would you be more likely to adopt a grounded theory approach, a deductive approach, or both? Why?

Week 8

Friday
May 21

Strategies of Theorizing: The Utility and Limits of Systems Theory as a Basis for Social Ecological Research; Contextual Theorizing

Assignment:

Altman, I. & Rogoff, B. (1987). World views in psychology: Trait, interactional, organismic, and transactional perspectives. In D. Stokols & I. Altman (Eds.), Handbook of Environmental Psychology. NY: John Wiley & Sons, 7-40.

Katz, D., & Kahn, R.L. Organizations and the system concept. In D. Katz & R.L. Kahn, The social psychology of organizations. NY: John Wiley & Sons, 14-29.

Maruyama, M. (1963). The second cybernetics: Deviation-amplifying mutual causal processes. American Scientist, 51, 164-179.

Miller, J.G. (1978). The need for a general theory of living systems. In J.G. Miller, Living Systems. NY: McGraw-Hill, 1-8.

Miller, J.G. (1986). Can systems theory generate testable hypotheses?: From Talcott Parsons to living systems theory. Systems Research, 3, 73-84.

Stokols, D. (1987). Conceptual strategies of environmental psychology. In D. Stokols & I. Altman (Eds.), Handbook of Environmental Psychology. NY: John Wiley & Sons, 41-70.

Optional:

Miller, J.G. (1978). The basic concepts. In J.G. Miller, Living Systems. NY: McGraw-Hill, 9-50.

Von Bertalanffy, L. General systems theory--A critical review. In W. Buckley (Ed.), Modern systems research for the behavioral scientist. Chicago: Aldine, 1972.

Weick, K.E. (1974). Middle-range theories of social systems. Behavioral Science, 19, 357-367.

Discussion Questions:

What are some of the limitations of general systems theory as a framework for social ecological research? Do the basic assumptions of systems theory offer useful guidelines for contextual theorizing? Why or why not? What are some of the distinguishing features of contextual theorizing? For what types of substantive problems would contextual analysis not serve as a useful theoretical approach?

Section III. Creativity and Theory Development: A Contextual View

Idea Paper: **Third Idea Paper Due: Friday May 28

Week 9

**Friday
May 28**

**Psychological Perspectives on Creativity;
Developing Transformational Theories**

Assignment:

Albert, R.S. Toward a behavioral definition of genius. In Albert, GE, 57-72.

Barron, F., Harrington, D.M. (1981). Creativity, intelligence, and personality. Annual Review of Psychology, 32, 439-476.

Baum, A., Fleming, R., & Davidson, L. M. (1983). Natural disaster and technological catastrophe. Environment and Behavior, 15, 333-354.

Crutchfield, J.P., Farmer, J.D., Packard, N.H., & Shaw, R.S. (1986). Chaos. Scientific American, 46-57.

Fromm, E. The creative attitude. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 1959, 44-54.

Maslow, A.H. Creativity in self-actualizing people. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 1959, 83-95.

Stokols, D. (1985). Transformational perspectives on environment and behavior. In W.H. Ittelson, M. Asai, & M. Ker (Eds.), Proceedings of the Second U.S.-Japan Seminar on Environment and Behavior, University of Arizona, Tucson, Arizona, October 6-9, 1985.

Optional:

Habermas, J. (1971). Knowledge and human interests. Boston: Beacon Press.

Nicholls, J.G. Creativity in the person who will never produce anything original or useful. In Albert, GE, 265-279.

Rogers, C.R. Toward a theory of creativity. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 1959, 69-82.

Discussion Questions:

In what respects do transformational theories go beyond the basic assumptions of systems theory, the development of grounded theory, and contextual theorizing? What are some of the key features of a contextual analysis of creativity? How might the topic of creativity be approached from a transformational perspective?

Week 10

**Friday
June 4**

Some Intellectual Benefits of Adversity and Stress; Physical and Social Contexts of Creativity

Journal:

****Journal Due, Friday, June 4****

**Assignment:
Section 1**

Albert, R.S. Family positions and the attainment of eminence. In Albert, GE, 141-154.

Eisenstadt, J.M. (1978). Parental loss and genius. American Psychologist, 33, 211-223.

Hennessey, B.A., & Amabile, T.A. The conditions of creativity. In R.J. Sternberg (Ed.), The nature of creativity. New York: Cambridge University Press, 11-38,

Levine, J.M., & Moreland, R.L. (2004). Collaboration:

The social context of theory development. Personality and Social Psychology Review, 8, 164-172.

Lasswell, H.D. The social setting of creativity. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 203-221.

Pickering, C. Creative malady. NY: Delta Books, 1974, 17-23, 266-309.

Sternberg, R.J. (2002). What is the common thread of creativity? Its dialectical relation to intelligence and wisdom. American Psychologist, 56, 360-362.

Optional:

Amabile, T. (1984). The social psychology of creativity. NY: Springer-Verlag.

Kaplan, S. (1983). A model of person-environment compatibility. Environment and Behavior, 15, 311-322.

Suedfeld, P., Metcalfe, J., & Bluck, S. (1987). Enhancement of scientific creativity by flotation rest (restricted environmental stimulation technique). Journal of Environmental Psychology, 7, 219-231.

Susa, A.M., & Benedict, J.O. (1994). The effects of playground design on pretend play and divergent thinking. Environment and Behavior, 26, 560-579.

Discussion Questions:

What are the implications of the articles by Eisenstadt and Pickering for research on stress and coping? What situational influences might foster the development of the "creative attitude" or personality? In what ways do physical and social environments encourage or inhibit creativity? How might environments be physically designed and/or socially structured to promote creativity?

**Assignment:
Section 2**

The Sociocultural Context of Creativity and Theory Development; Course Summary

Anderson, H.H. (1959). Creativity in perspective. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 236-267.

Lynn, R. The social ecology of intelligence and achievement. In Albert, GE, 217-232.

Mead, M. Creativity in cross-cultural perspective. In H.H. Anderson (Ed.), Creativity and its cultivation. NY: Harper & Row, 1959, 222-235.

Simonton, D.K. History and the eminent person. In Albert, GE, 233-240.

Stein, M.I. (1975). A summary and a view toward the future. In M.I. Stein, Stimulating creativity, Volume 2. NY: Academic Press, 253-285.

Stokols, D., Misra, S., Moser, R.P., Hall, K.L., & Taylor, B. (2008). The ecology of team science: Understanding contextual influences on transdisciplinary collaboration. *American Journal of Preventive Medicine*, 35(2S):S96-S115.

Optional:

Simonton, D.K. (1984). Genius, creativity, and leadership: Historiometric inquiries. Cambridge, MA: Harvard University Press.

Simonton, D.K. (1975). Sociocultural context of individual creativity: A transhistorical time-series analysis. *Journal of Personality and Social Psychology*, 32, 1119-1133.

Discussion Questions:

Considering the literature covered in this course, what important aspects of creativity and theory development have been neglected in prior research? What do you regard as the most crucial "next steps" in the development of your own theoretical ideas?

TBA

Third Group Tutorial Session to Discuss Idea Paper 3
