

Fall, 2003  
Tuesday, 11:00 - 1:50  
Soc. Ecology I Rm. 112  
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Office Hours:  
Thursday 2:00-3:30

## **Social Ecology 200**

### **SEMINAR IN SOCIAL ECOLOGY**

**(Course Web Site: <http://eee.uci.edu/03f/51000>)**

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#### **Overview**

The term, *ecology*, pertains broadly to the interrelations between organisms and their environments. From its early roots in biology, the ecological paradigm has evolved within several disciplines to provide a general framework for understanding the nature of people's transactions with their physical and sociocultural surroundings. The field of *social ecology* gives greater attention to the social, institutional, and cultural contexts of people-environment relations than did earlier versions of human ecology, which were more closely oriented to biological processes and the geographic environment.

The academic mission of the School of Social Ecology is to train students to analyze research and policy questions from a broad, *ecological perspective that integrates multiple disciplines and links basic theory and research with community problem-solving*. In keeping with this mission, the present course offers a broad overview of social ecology as a framework for cross-disciplinary research and community problem-solving. The assigned readings and class discussions highlight core principles and over-arching themes inherent in the social ecological perspective.

Initial readings trace the roots of the ecological paradigm in various disciplines and provide an historical perspective on the development of social ecology as a multidisciplinary field, both at UCI and beyond. Subsequent course sessions examine conceptual and methodological principles of social ecology and systems theory, including the concepts of interdependence, multi-level analysis of people-environment

transactions, and the contextual scope of theory, research, and community intervention. Also, distinctions between multidisciplinary, interdisciplinary, and transdisciplinary research are discussed. Finally, examples of social ecological theories, research projects, and community interventions are examined from the perspectives of Social Ecology's four academic departments: Criminology, Law and Society; Environmental Analysis and Design; Psychology and Social Behavior; and Urban and Regional Planning.

## **Course Requirements**

Students are expected to carefully review all assigned readings listed in the attached course calendar prior to discussion of those readings in class; and to attend and participate actively in class discussions each week (**20%** of course grade).

A midterm exam will be given during Week 7 focusing on the lectures and readings covered during Weeks 1-6. The midterm exam will consist of short-answer and essay questions, and count for **40%** of your course grade.

You are also required to submit a team term project during the 10th week of the quarter (on December 2). Teams will consist of approximately 4-6 students who, ideally, represent two or more disciplinary backgrounds (or departmental affiliations within Social Ecology). Team members will work collaboratively to develop a transdisciplinary, social ecological analysis of a particular community problem or public policy issue. Team projects can be submitted in two formats: (a) a *term paper including bibliography* (about 12-15 pages in length); or (b) *oral report with written outline and bibliography* (incorporating powerpoint or photographic slides, video, and/or posters/s) presented in class during the 10<sup>th</sup> week of the quarter (on December 3). Each team's project should provide: (1) a brief statement of the *societal importance* of the problem and a review of the *relevant research literature*; (2) a *theoretical conceptualization* of the problem and research hypotheses that incorporates one or more *social ecological principles or themes* covered in the course; (3) an outline of *research methods* that would be used to study the problem or evaluate the results of a community intervention aimed at reducing the problem; and (4) an assessment of the extent to which your team's approach to the problem reflects an *interdisciplinary (or transdisciplinary) perspective*. Term projects will count for **40%** of your (and your fellow team members') grade in the course. A 1-2 page outline of your team's proposed project is due during the 6th week of the course.

## Course Calendar

### SEMINAR IN SOCIAL ECOLOGY

#### Schedule of Discussion Topics and Reading Assignments

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#### **Section I. Historical Foundations of Social Ecology**

The first section of the course reviews key developments in the history of Social Ecology, both as an interdisciplinary field and as an academic unit at UCI. Conceptual and methodological principles of ecological research are discussed.

Week 1  
September 30

#### **The Ecological Paradigm: Principles of Biological, Human, and Social Ecology**

**Assignment:**

Alihan, M.A. (1938). The doctrine and its setting (Chap. 1). Social ecology: A critical analysis. NY: Cooper Square Publishers, 1-10.

Binder, A. (1972). A new context for psychology: Social ecology. American Psychologist, 27, 903-908.

Catalano, R. (1979). The biological basis of the ecological paradigm (Chap. 2); The ecological paradigm (Chap. 4). Health, behavior and the community: An Ecological Perspective. New York: Pergamon Press, 13-27, 64-86.

**Optional:**

Hawley, A. (1950). Human ecology: A theory of community structure. New York: Ronald Press, 3-10

Also, the internet sites listed below provide additional information about the principles and themes of Social Ecology. See for example the Conceptual Social Ecology Module link on the EAD homepage, the working definitions of Social Ecology posted at the SE275 site, and the introductory section under "Links to Other Health Promotion Web Sites" on the UCIHPC homepage.

Conceptual Social Ecology:

<http://www.seweb.uci.edu/cse/cse.html>  
Interdisciplinary Research in Social Ecology (SE275):  
<http://eee.uci.edu/97s/51025/>  
UCI Health Promotion Center:  
<http://www.healthpromotioncenter.uci.edu/>  
Institute for Social Ecology  
<http://www.social-ecology.org/>

**Discussion  
Questions:**

What are the core principles or themes of ecological analysis? Are the principles of community structure proposed by the Chicago School human ecologists generalizable to urban areas throughout the US and beyond? What are some of the strengths and limitations of applying biological principles to the analysis of human communities? What societal circumstances contributed to the development of the Program in Social Ecology at UC Irvine during the early 1970s? In what respects does the Irvine School of Social Ecology incorporate or depart from earlier formulations of human ecology?

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Week 2  
October 7

**Levels of Analysis, Environmental Structure, and Contextual Scope of Ecological Inquiry**

**Assignment:**

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32, 513-530.

Bullard, R.D., & Johnson, G.S. (2000). Environmental justice: Grassroots activism and its impact on public policy decision making. Journal of Social Issues, 56, 555-578.

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

Lynch, K. (1960). The image of the environment (Chap. 1); The city image and its elements (Chap. 3). The image of the city. Cambridge, MA: 1960, 1-13, 46-48.

Michelson, W. (1970). What human ecology left behind in the dust (Chap. 1). Man and his urban environment: A sociological approach. Reading, MA: Addison-Wesley, 3-32.

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

Wicker, A.W. (1979). Introduction; Behavior settings (Chap. 1). An introduction to ecological psychology. Monterey, CA: Brooks/Cole, 1-5, 6-19.

**Optional:**

Milgram, S., & Jodelet, D. (1976). Psychological maps of Paris. In H.M. Proshansky, W.H. Ittelson, & L.G. Rivlin (Eds.), Environmental psychology. Second edition. New York: Holt, Rinehart, & Winston, 104-124.

**Discussion Questions:**

To what extent does the School of Social Ecology at UCI address Michelson's criticisms of earlier perspectives on human ecology? Which assumptions emphasized by the Chicago School human ecologists are challenged by Firey's analysis of sentiment and symbolism and Lynch's study of urban imageability? In what respects do biomes, behavior settings, and urban communities constitute ecological units of analysis? What are the distinctive attributes of contextual analyses of people-environment relations? By what criteria can the contextual scope of a theory, research project, or community intervention be gauged?

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Week 3  
14

**Systems Theory as a Basis for Social Ecological Research: October Homeostasis, Disequilibrium, and Deviation Amplification**

**Assignment:**

Katz, D., & Kahn, R.L. (1966). Organizations and the system concept. 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.

Milgram, S. (1970). The experience of living in cities. Science, 167, 1461-1468.

Wynne-Edwards, V.C. (1962). Self-regulating systems in populations of animals. Science, 147, 1543-1548.

**Optional:**

Bales, R.F. (1949). Adaptive and integrative changes as sources of strain in social systems. In R.F. Bales, Interaction process analysis: A method for the study of small groups. Cambridge, MA: Addison-Wesley, 127-131.

Selye, H. (1973). The evolution of the stress concept. American Scientist, 61, 692-699.

Simmel, G. (1950). The metropolis and mental life. Sociology of Georg Simmel. Glencoe, IL: The Free Press, 344-356.

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

**Discussion Questions:**

What are the distinctive properties of open systems as outlined by Miller and Katz & Kahn? How do Milgram's analysis of urban life, Selye's conceptualization of stress, Bales' model of group dynamics, and Wynne-Edwards' theory of internal checks on population size exemplify system processes? In what ways do Maruyama's and Weick's analyses extend earlier formulations of systems theory? What are the strengths and limitations of systems theory as a framework for social ecological research?

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Week 4  
October 21

**Interdependence of the Social and Physical Environment and Their Influence on Behavior and Well-being**

**Assignment:**

Altman, I. (1975). Introduction. The environment and social behavior. Monterey, CA: Brooks/Cole Publishing Company, pp. 1-9.

Appleyard, D. (1981). Livable streets. Berkeley, CA: University of California Press. Chapters 1, 2 & 8 (15-28, 29-40, 139-144).

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

Gehl, J., & Gemzoe, L. (1996). The scale of the city center: Small units and many doors. Public spaces, public life. Copenhagen: The Danish Architectural Press, 32-33.

Katz, P. (1998). New urbanism. In W. van Vliet--(Ed.), The encyclopedia of housing. Thousand Oaks, CA: Sage Publications, 397-400.

Newman, O. (1973). Defensible Space. New York: Macmillan Publishing Co., 1-19.

Ulrich, R.S. (1984). View through a window may influence recovery from surgery. Science, 224, 420-421.

**Optional:**

Bullard, R.D. (1990). Dumping in Dixie: Race, class, and environmental quality. Boulder, CO: Westview Press, 1-36, 97-126.

Platt, J. (1973). Social traps. American Psychologist, 28, 641-651.

Stokols, D., Grzywacz, J.G., McMahan, S., & Phillips, K. (in press). Increasing the health promotive capacity of human environments. American Journal of Health Promotion.

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

See also the following web sites on environmental justice and the new urbanism:

<http://www.umich.edu/~snre492/index.html>

<http://www.ejrc.cau.edu/>

<http://www.cnu.org/>

**Discussion**

**Questions:**

Interdependence between the physical and social dimensions of environments is a core theme in systems theory. In what respects is the interdependence between physical and social features of environments variable or constant? How do Altman's analysis of privacy, Appleyard's study of residential streets, Baum et al.'s

analysis of technological and natural disasters, and Newman's theory of defensible space reflect the interdependent influence of the physical and social environment on behavior and well-being? What assumptions about the joint influence of physical and social environmental conditions are evident in Bullard's conceptualization of environmental racism and in Katz' formulation of the "new urbanism" as a framework for urban planning?

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Week 5  
October 28

### **Disciplines, Paradigms, and Cross-Disciplinary Research**

#### **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.

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

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

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., Fuqua, J., Gress, J., Harvey, R., Phillips, K., Baezconde-Garbanati, L., Unger, J., Palmer, P., Clark, M., Colby, S., Morgan, G., & Trochim, W. (in press). Evaluating transdisciplinary science. Nicotine and Tobacco Research.

#### **Optional:**

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.

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

What criteria are used by Durkheim and Lewin to demarcate the disciplines of psychology and sociology? In what ways are the notions of "distinct scientific disciplines", "disciplinary boundaries", and reductionism relevant to the development of social ecological theories? How are the concepts of discipline, paradigm, and theory interrelated yet distinct? According to Campbell, what are the major factors that constrain or facilitate interdisciplinary research? By what criteria does Rosenfield distinguish between multidisciplinary, interdisciplinary, and transdisciplinary research? How have these criteria been operationalized in recent studies of cross-disciplinary scientific collaboration?

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## **Section II. Applying Social Ecological Theory and Research to Community Problem-Solving**

This section of the course examines applications of social ecological theory and research to the analysis and resolution of community problems, from the vantage point of Social Ecology's four academic departments.

Week 6  
November 4

### **Social Ecological Analyses of Community Problems and Unintended Side Effects of Community Interventions**

### **Assignment:**

**\*\*\* Outlines of Term Papers Due\*\*\***

Altman, D. G. (1995). Sustaining interventions in community systems: On the relationships between researchers and communities. Health Psychology, 14, 526-536.

Barksy, A.J. (1988). The paradox of health. New England Journal of Medicine, 318, 414-418.

Geller, E.S. (1991) Where's the validity in social validity? Journal of Applied Behavior Analysis, 24, 189-204.

Everett, P.B., Hayward, S.C., & Meyers, A.W. (1974). The effects of a token reinforcement procedure on bus ridership. Journal of Applied Behavior Analysis, 7, 1-9.

Schulz, R., & Hanusa, B.H. (1976). Long-term effects of control and predictability-enhancing interventions: Findings and ethical issues. Journal of Personality and Social Psychology, 36, 1194-1202.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. American Journal of Health Promotion, 10, 282-298.

**Optional:**

Sarbin, T.R. (1970). The culture of poverty, social identity, and cognitive outcomes. In Allen, V.L. (Ed.), Psychological Factors in Poverty. Chicago: Markham Publishing Company, 29-47.

Stokols, D., Grzywacz, J., McMahan, S., & Phillips, K. (in press). Increasing the health promotive capacity of human environments. American Journal of Health Promotion, 18.

See also the following web site on building capacity for community change: <http://ctb.ku.edu>

**Discussion**

**Questions:**

Compare and contrast the concepts of scientific and social validity. In what respects are the community interventions evaluated by Schulz & Hanusa's and Everett et al. socially valid or invalid? What is meant by the "ecological depth" of intervention outcomes? What circumstances enhance the sustainability of community interventions?

**Veterans Day Holiday Observance—Class Session and Midterm Exam Rescheduled to Thursday, November 13, 11:00 AM – 1:50 PM**

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

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

**Optional:** Stokols, D. (1988). Transformational processes in people-environment relations. In McGrath, J.E. (Ed.), The Social Psychology of Time: New Perspectives. Newbury Park, CA: Sage Publications, 233-252

**Discussion Questions:**

The articles by Gergen and Platt suggest rather different criteria for gauging the value of scientific research. What are the key functions of theory according to these authors? Are Gergen's and Platt's assumptions about the usefulness of scientific theories compatible or mutually exclusive? What conceptual "tradeoffs" should be considered when developing theories of broad vs. narrow contextual scope? What are the distinguishing features of transformational vs. non-transformational theories of people-environment transactions?

November 13      **\*\*\*Midterm Exam\*\*\* 12:30 – 1:50 PM**

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Week 8  
November 18      **Social Ecology of Community Planning, Urban Design, Environmental Health Science and Policy**

**Guest Lecturers:**      **Professor Kristen Day, URP Department**  
   **Professor Lisa Grant, EAD Department**

**Assignment:** Davis, M. (1992). Ecology of fear: Los Angeles and the imagination of disaster. Chapter 1. New York: Henry Holt & Co., Metropolitan Books, 5-55.

Day, K. (2000). The ethic of care and women's experiences of public space. Journal of Environmental Psychology, 20, pp. 103-124.

Gath, E. (2003). Earthquake risk at San Bernardino Valley College: Hazard mitigation astride the San Jacinto Fault in Southern California. Breadth requirement paper, Department of Environmental Analysis and Design, School of Social Ecology, UCI.

Yeats, R. S. (2001). Memories of the future: The uncertain art of earthquake forecasting (Chap. 8). Living with earthquakes in California. Corvallis, OR: Oregon State University Press, 185-216.

Ruddick, S. (1996). Constructing difference in public spaces: Race, class, and gender as interlocking systems. Urban Geography, 17(2), 132-151.

Soja, E.W. (1992). Inside exopolis: Scenes from Orange County. In M. Sorkin (Ed.), Variations on a theme park. The new American city and the end of public space (pp. 94-122). NY: Hill and Wang.

**Optional:**

Stern, P.C. (1992). Psychological dimensions of global environmental change. Annual Review of Psychology, 43, 269-302.

**Discussion Questions:**

What are some similarities and differences in how people and public spaces are regarded, in each of the readings? What could a social ecological perspective bring to the study of public spaces? What are possible advantages or shortcomings of such a perspective? Earthquakes and other “natural” hazards in Southern California present significant challenges for creating and maintaining healthy communities. Are natural disasters caused by the physical environment, or by interactions between humans and earth systems? What could a social ecological perspective bring to the study of natural disasters?

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Week 9  
November 25

**The Social Ecology of Violence and Crime**

**Guest Lecturers: Professor James Meeker, CLS Department  
Professor Raymond Novaco, PSB Department**

**Assignment:**

Kliewer, W., Lepore, S.J., Oskin, D. & Johnson, P.D. (1998). The role of social and cognitive processes in children's adjustment to community violence. Journal of Consulting and Clinical Psychology, 66, 199-209.

Meeker, J.W., & Vila, B. (2000) "Issues in Developing and Maintaining a Regional Gang Incident Tracking System." In R.C. Huff, Ed., Gangs In America, Third Edition. Newbury Park, CA: Sage, pp. 147-158.

Sampson, R.J., & Groves, W.B. (1989). Community structure and crime: Testing social-disorganization theory. American Journal of Sociology, 94, 774-802.

Sullivan, C.M., & Bybee, D.L. (1999). Reducing violence using community-based advocacy for women with abusive partners. Journal of Consulting and Clinical Psychology, 67, 43-53.

**Optional:**

Lane, J., & Meeker, J.W. (2003). Fear of gang crime: A look at three theoretical models. Law & Society Review, 37, 425-456.

**Discussion Questions:**

What are the distinctive features of an ecological approach to the study of community violence and crime? In what ways do ecological and non-ecological approaches to these phenomena differ?

Week 10  
December 2

**Social Ecology and Social Change**

**Assignment:**

**\*\*\*Term Projects Due\*\*\***

(class time will be allotted for project reports)

Negroponte, N.P. (1995). The post-information age. In Being Digital. NY: Vintage Books, 163-171.

Putnam, P.D. (1995). Bowling alone: America's declining social capital. Journal of Democracy, 6, 65-78.

Stokols, D., & Montero, M. (2002). Toward an environmental psychology of the internet. In R. Bechtel & A. Churchman (Eds.), Handbook of Environmental Psychology (661-675). New York: John Wiley & Sons.

**Optional:**

See also the following web sites on Healthy Communities Programs, sponsored by the National Civic League; and the "Digital Divide" in America

<http://www.ncl.org>

<http://www.ntia.doc.gov/ntiahome/digitaldivide/>

**Discussion**

**Questions:**

What are some of the social, behavioral, and health consequences of society's increasing reliance on digital communications? What are the defining features of "social capital" discussed by Putnam? In what ways do telecommunications technologies either strengthen or erode the social capital of a community?

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