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Author

Stokols, Daniel

Publication Date

1998

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Daniel Stokols

School of Social Ecology

University of California, Irvine

May 1998

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Paper presented at the Social Ecology Associates Annual Awards Reception, School of Social Ecology, University of California, Irvine, May 21, 1998.

Introductory Remarks

First, I'd like to thank Dave Dooley for his very kind introduction. Dave has been a steadfast friend over the past 25 years and a colleague who has made pivotal contributions to the development of our Program and School, including his involvement in the Standish Committee in 1989 to help plan the future of psychology at UCI; his outstanding service as our founding Associate Dean for Undergraduate Studies, and more recently, his chairmanship of the Social Ecology Web Committee.

I also want to thank the Social Ecology Executive Committee for bestowing this honor on me; the members of the Social Ecology Associates for their invaluable support of our School in so many ways, including their commitment to establishing and sustaining this annual awards event; and all of my colleagues in Social Ecology--faculty, staff, and students--for giving me the privilege of serving as your Director and Dean over the past 10 years.

And, finally, I want to acknowledge several members of my family who are here this evening. I have been blessed by having great parents--my mother, Harriet Stokols, celebrated her 82nd birthday last March and throughout my life, she has always been there as an enduring source of support. My father, Sol Stokols, who died when I was 16, was an extremely kind soul and his values and spirit have had an enduring influence on me. I also want to thank my brother, Mickey, and my Sister-in Law, Adrienne, who are here tonight for their love and support over the years. My wife, Jeanne, is truly a gem and she has been a tremendously supportive partner throughout our 26 and-a-half years of marriage; and we have been blessed with two great sons, Andy, who is here this evening, and Eli who will be coming home from Berkeley this weekend. Their love and support have made possible whatever I've been able to accomplish academically and professionally.

I have chosen to focus my remarks tonight on the Future of Interdisciplinarity in the School of Social Ecology. Alternatively, I would have enjoyed describing the collaborative research I've been conducting with Dr. Shari McMahan, Chip Clitheroe, Kimari Phillips, Tracy Bidwell, Jerry Sinykin, Meredith Wells, and Mandy Krawitz on the Social Ecology of Health Promotion Within Small Businesses. We have worked together at the UCI Health Promotion Center on three grant-funded projects over the past several years, and I have been fortunate to be able to work with these individuals as research colleagues. But I decided to focus tonight on the future prospects for interdisciplinarity within our School, as I believe that we are now at a critical choicepoint in the history of Social Ecology, regarding the continuation or possible extinction of

our interdisciplinary mission in the coming years.

I begin with an overview of where we've been since the founding of the Program in Social Ecology in 1970 and, two decades later, the reorganization of the Program as a school in 1992. I then comment on the organizational changes that have occurred, from the establishment of the School to the present time. The concluding part of my talk examines some of the choices we now face, and the circumstances that I believe will determine the future prospects for interdisciplinarity in our School during the early part of the 21st Century.

<u>Early Development of the Program in Social Ecology</u>

I came to the Program in Social Ecology in 1973 as an assistant professor fresh out of graduate school. The Program had been founded at UCI by Arnie Binder in 1970 as a small experimental, degree-granting unit (Binder, 1972). In his earlier career, Arnie was a psychometrician working in UCI's School of Social Sciences, led at that time by Dean James March. At mid-career, Arnie had decided to organize an academic unit emphasizing interdisciplinary research and teaching, and the application of basic theory and research to community problem-solving. Arnie's colleagues in the School of Social Sciences felt that the new unit did not fit well with the theoretically-oriented mission of their School. So, Arnie established Social Ecology, with the help of Chancellor Daniel Aldrich, as a small independent unit that reported directly to UCI's Vice Chancellor for Academic Affairs.

The establishment of the Program in Social Ecology at UCI was a highly improbable event. The development of the Program was quite unexpected, given the strong emphasis on, and influence of, the natural sciences at UCI (encouraged, along the way, by the growth of the Irvine Industrial Complex-- featuring biomedical and high tech research); and in view of the conservative political bent of Orange County during the 1970s and 80s. Also, in its efforts to combine the environmental, behavioral, legal, and health sciences within a single academic unit, the upstart Program in Social Ecology was viewed by many as inappropriately infringing on the academic turf of pre-existing schools and departments at UCI. In view of the many circumstances that were inimical to Social Ecology's development at UCI, its establishment and evolution on the Irvine Campus can only be explained by considering the influential role of powerful ideas and personalities, exemplified by:

(1) Arnie Binder's dogged determinism and vision of an interdisciplinary academic unit, and his efforts to establish the Program in Social Ecology against all odds;

(2) Chancellor Daniel Aldrich's openness to a new organizational concept and his commitment to the principles of land-grant universities that serve the needs of their surrounding communities and society as a whole;

(3) and Ray Catalano's (1982) commitment to publishing his book, <u>Health, Behavior, and the Community</u>, as the conceptual foundation for his Principles of Social Ecology (SE1) and Introduction to Environmental Analysis (E-8) core courses--both of which excited early generations of Social Ecology students during the 1970s and 80s. *The influence of powerful ideas and personalities on the evolution of Social Ecology at UCI is a point that I will come back to later in my talk.*.

I was attracted to join the Program in Social Ecology as a junior faculty member, despite the pointed questions posed by my graduate advisors in psychology at the University of North Carolina, Chapel Hill, as I had become interested in interdisciplinary research as an undergraduate at the U. of Chicago during the

60s (where, by the way, I had the opportunity to take a Social Psychology course co-taught by sociologist, Richard Flacks, and our own Tom Crawford, a social psychologist); and had decided to take minors in City and Regional Planning, Sociology, and work on a research project in the School of Public Health, while completing my doctorate in social psychology at North Carolina. My multidisciplinary interests were considered by my graduate advisors in psychology to be somewhat deviant in those days.

The early years in Social Ecology were exciting, but fraught with concerns about the limited viability of an interdisciplinary, degree-granting unit at a major research university. We were constantly made aware of challenges to Social Ecology's existence as an academic unit, and many plans were proposed by university administrators to disband Social Ecology entirely, and send its faculty members to other schools and departments at UCI.

Nonetheless, the Program in Social Ecology prevailed during the 1970s and 80s, and established a strong niche in higher education because of its unique, interdisciplinary orientation. Social Ecology's curriculum and research programs not only emphasized the importance of applying theory and research to community problems, but also required all SE majors to complete field internships at community settings before graduating from UCI. As well, the Program emphasized several integrative concepts and methods drawn from systems theory and the field of ecology (Alihan, 1964; Emery & Trist, 1972; Hawley, 1950; Katz & Kahn, 1966; Miller, 1978); and the value of applying multiple disciplinary perspectives to the analysis of community problems, ranging from atypical child development and environmental pollution to urban design, violence and crime (Binder, Stokols, & Catalano, 1975; Stokols, 1992).

By 1988, the Social Ecology Program had attracted hundreds of BA majors, scores of Ph.D. students, and 30 full-time faculty members whose disciplinary training spanned the fields of applied environmental microbiology, psychology, sociology, law, urban planning, demography, and public health. But as the Program grew in size, it became increasingly cumbersome as an organizational unit since all academic tasks (e.g., curriculum planning, merits and promotion reviews, graduate and undergraduate admissions) were handled by the faculty as a committee of the whole. Moreover, the longevity of our non-traditional program was jeopardized by its marginalized role and status on the Irvine Campus; and by worsening state and federal budgets that threatened to dissolve all non-traditional academic units--which were increasingly viewed by campus administrators and legislative analysts as "luxury items" within a university structure that aspired to be leaner and more "efficient").

Robert Kahn and Denis Prager (1994) state that "*..the dominant organizational units in universities are discipline-based departments, each of which tends to protect its distinctive turf. The persistent competition for funds and students, the development of separate disciplinary languages, and the serene disinterest in their translation across departmental boundaries are all too familiar*." They further note that "*Some attempts to escape from the ethnocentrism of university departments are successful, although they tend to be marginal. Most numerous are interdepartmental groups of faculty members who, recognizing an area of common interest, come together to discuss issues, plan and conduct research, and perhaps even train graduate students. The typical life of these units is embattled and short...*" And, indeed, most efforts to establish and sustain interdisciplinary academic units within universities have not succeeded. The Department of Social Relations at Harvard University and The Division of Man-Environment Relations at Penn State are but two examples of interdisciplinary units that eventually were disbanded.

Faced with the prospects of a limited future, the Faculty in Social Ecology petitioned the University of California Academic Senate and Systemwide Administration for authorization to reorganize the Program as a "School" with multidisciplinary "Areas" or "Departments". The faculty anticipated that this new

organizational structure would create centrifugal forces toward fragmentation and specialization, but felt that these potential costs had to be weighed against the prospects of an abruptly-shortened organizational lifespan brought about by increasingly tight university and state budgets.

After a three-year review process by 14 committees of the UCI and Systemwide Senate and Administration, the UC Regents designated our Program as the School of Social Ecology in May, 1992.

Within the School of Social Ecology at UCI, we were successful at transforming a previously marginalized interdisciplinary unit into a thriving and well-established school on the campus. But the very success of our reorganization efforts and University-wide recognition as a school with formal departments has created many impediments to free-flowing collaboration in research and teaching across disciplinary boundaries.

Max Weber wrote about the inevitable forces toward bureaucratization as organizations become larger and more differentiated (cf., Gerth & Mills, 1946). It is these pressures of size and differentiation, as well as the formal establishment of department structures and identities, that create potential and actual barriers to transdisciplinary collaboration in academic settings. At this point in time, it seems fitting to consider whether the School of Social Ecology has lived up to its reputation for interdisciplinary scholarship and teaching since achieving Regental recognition as a school in 1992; and to ask directly whether the Faculty in Social Ecology still have the will and the resolve to sustain the interdisciplinary mission of the School in the coming years.

Defining and Measuring Qualities of Interdisciplinarity

Before we can assess whether we are abiding by our interdisciplinary rhetoric or, in fact, whether we want to maintain that aspiration for the future, it is important to define more clearly what we mean by interdisciplinarity. Generally, *cross-disciplinary research* refers to a process by which the perspectives of two or more scientific or professional fields are combined to achieve a more complete understanding of a particular research question or phenomenon (cf., Faber & Scheper, 1997).

Patricia Rosenfield (1992) distinguished between three forms of cross-disciplinary research: (1) multidisciplinary, (2) interdisciplinary, and (3) transdisciplinary research. Multidisciplinarity refers to a process whereby researchers in different disciplines work independently or sequentially, each from his or her own disciplinary-specific perspective, to address a common problem. Interdisciplinarity is a process in which researchers work jointly, but from each of their respective disciplinary perspectives, to address a common problem. Transdisciplinarity is a process by which researchers work jointly using a shared conceptual framework that draws together discipline-specific theories, concepts, and approaches, to a address a common problem.

Considering the three types of cross-disciplinary research outlined by Greenfield, it is useful to differentiate between individuals' efforts to bridge disciplinary boundaries within their own scientific or professional work; and the more collaborative, interpersonal process of cross-disciplinary research that occurs when two or more colleagues work together on a common problem. Each of us in Social Ecology has probably initiated sole-investigator projects or single-authored publications that integrate multiple, disciplinary perspectives. In contrast to these individually-organized projects, collaborative interdisciplinary research requires that certain social and organizational processes be initiated and maintained. These organizational prerequisites for cross-disciplinary collaboration pose logistical challenges that are not encountered when single investigators conduct cross-disciplinary projects on their own.

At least two forms of collaborative, network-based interdisciplinarity are evident in academia today: (1) <u>ad hoc research teams or networks</u>, organized by particular agencies and foundations, with the charge of developing an interdisciplinary and transdisciplinary perspective on a specific research topic or question (Guzzo & Dickson, 1996; National Research Council, 1990); and (2) <u>more permanent, institutional structures</u> (such as research centers, institutes, interdisciplinary programs, and schools or colleges) based in either university or non-academic settings. The obstacles to cross-disciplinary collaboration, as well as the incentives for that type of work, are likely to vary across these two research contexts.

Some of the <u>key constraints to effective cross-disciplinary collaboration in ad hoc networks and teams</u> are the following:

1. The duration of these ad-hoc collaborations are <u>typically time-limited</u> and the date by which the effort is to be concluded (e.g., the due-date for a team report to an agency or foundation), and at which time the team is to be dissolved, is often known in advance by the members of the team. Therefore, commitment to sustain and extend the collaboration that develops around a specific research question or topic is typically wanes once the team is dissolved.

2. <u>The time available for face-to-face communications</u> among team and network members is typically quite limited. Often, the members of these groups work remotely in different parts of the country or world, communicating with each other asynchronously (e.g., via voice and e-mail messages). Synchronous or "real time" interactions are arranged from time to time in the form of workshops and conferences or via teleconferencing; but the opportunities for sustained interaction and collaborative "brainstorming" are often few and far between.

3. Each member's commitment of time and energy to their team's collaborative research tasks are limited by the demands on their time and other research involvements linked to their "home" institutions and organizations. Thus, the member of a foundation-sponsored research team typically must "juggle" other research, administrative, and service activities along with their commitments to the research team.

The preceding points suggest that when ad-hoc research teams and networks are formed, efforts should be made to:

(a) maximize opportunities for face-to-face meetings and working sessions among team members (though these efforts will necessarily be limited by funding and time constraints; e.g., university department chairs will be hard-pressed to release faculty members from teaching and service responsibilities so that they can participate more actively in "outside" research teams; and foundation/agency budgets will be limited in their capacity to support frequent meetings of extended duration among team members);

(b) find ways of sustaining collaboration and interaction among team members beyond the formal life-span of the network or team (some of the ways that this might be accomplished are through the establishment of e-mail listserves and team "reunions" at specified intervals (perhaps oriented toward the development of collaborative publications and grant proposals), once the team has formally disbanded.

In contrast to ad hoc research teams and networks, the establishment of cross-disciplinary research centers, institutes, degree-granting programs, schools, and colleges require substantial and sustained investment of resources to maintain the requisite infrastructure for supporting collaborative teaching and research. In our own School, these human and organizational resources include the maintenance of a required core curriculum at undergraduate and graduate levels; the commitment of time among faculty, staff, and students

to the general BA, MA, and Ph.D. degree programs in Social Ecology; and the formation of cross-departmental Focused Research Groups. The commitment of resources to cross-disciplinary scholarship and teaching invariably competes with the infrastructure support needs of our acadmic departments and specialized degree programs. Confronted by these tensions, it is reasonable to ask: "Is our commitment to interdisciplinarity worth the costs associated with its preservation and, further, is this commitment sustainable in the long run?" I turn now to these two fundamental questions: (1) Interdisciplinarity--what is it good for?; and (2) Can we sustain it in the longrun?

The Benefits of Interdisciplinary Scholarship and Teaching

The benefits of maintaining our commitment to interdisciplinarity in the School of Social Ecology can be more clearly identified by contrasting the scientific and ideological aspects of cross-disciplinary work. The ideological aspects of interdisciplinarity are reflected in the non-scientific, organizational outcomes associated with individuals' expressed commitment to, and engagement in, interdisciplinary work. In Merton's (1968) terminology, individuals' declarations of commitment to interdisciplinarity can serve several latent functions, such as (1) offering evidence of one's allegiance to the stated goals of the school, and (2) for the presumably higher quality of one's work to the extent that it incorporates multiple disciplinary perspectives. It is important, I believe, to ensure that our commitment to preserving the interdisciplinary mission of Social Ecology is not driven by these non-scientific, latent functions. It is also important to recognize that the scientific quality of interdisciplinary theory or research is not necessarily greater than that which reflects a narrower disciplinary perspective, if other features of the project are found to be lacking, such as its methodological rigor, conceptual clarity, or originality.

In contrast to these latent organizational outcomes of interdisciplinarity, I believe that cross-disciplinary research and teaching, if conducted rigorously and innovatively, are associated with genuine scientific, public policy, and educational benefits. These advantages include:

(1) the higher levels of explanatory power that are often afforded by cross-level, transdisciplinary theories relative to reductionist analyses rooted in singular disciplinary perspectives;

(2) the higher levels of convergent and discriminant validity that can be attained by using multiple methodologies in scientific research; these are real benefits of the methodological pluralism that is evident in the wide range of theory and methods courses offered in the School of Social Ecology;

(3) the development of broad-gauged public policies that are grounded in multiple disciplinary perspectives and are, thereby, more likely to identify potentially adverse consequences of community interventions that otherwise might be missed by narrower public policy perspectives; and

(4) the unique, generalist orientation of Social Ecology's undergraduate and graduate alumni, which enables them to tackle complex community problems whose solution or amelioration requires the integration of multiple disciplinary perspectives; and, at the same time, makes them highly attractive to prospective employers.

In short, I believe that maintaining our commitment to interdisciplinary teaching and research is associated with important benefits at scientific, public policy, and educational levels. But the question remains: Are these benefits sustainable in the face of organizational and structural impediments to cross-disciplinary collaboration and, if so, what steps must be taken to strengthen the interdisciplinary mission of our School?

Structural Impediments and Incentives for Interdisciplinarity

In discussing the impediments and incentives for interdisciplinarity that arise in university-based organizations, I will draw on the contrasting theories of history espoused Karl Marx (1930) and Max Weber (1958)--especially their very different explanations for rise of capitalism in Western society. You may be wondering: What do those theories have to do with an analysis of the future prospects for interdisciplinarity in the School of Social Ecology in 1998 and beyond? I believe that the Marxian and Weberian perspectives on history, and the contrasts between them, have important implications for understanding where we've been as an academic unit, and where we're headed in the next several years.

Marx's materialist theory of history describes an inevitable process whereby capital, or the means of producing various goods, gradually accumulates in the hands of the capitalist and the bourgeois classes in society (cf., Engels, 1968). Capitalists callously expropriate the value of the labor provided by a subserviant class--the proletarians. The processes of material accumulation and inquitable distribution inexorably lead to the development of class consciousness among the oppressed class, revolution among the oppressed groups in society, the establishment of a communitarian society; and, eventually, the "withering away of the state". According to Marx, class polarization and inequitable distribution of wealth in society are the pivotal forces that determine the flow of events. It's not the ideas, sentiments, and values of individuals that shape history, but rather social structures and economic forces that operate at the macro-societal level.

Max Weber, who epitomized the interdisciplinary scholar, provided a distinctly different interpretation of the rise of capitalism in Western Society. For Weber, it was the power of ideas rather than material social structures that shaped the course of history. To better understand the role of ideas in triggering the rise of capitalism, Weber integrated the assumptions and analytical tools of several disciplines, including personality psychology, the sociology of religion, and history. Weber's ideas were in marked contrast to the discipline-specific views of Karl Marx and Emil Durkheim (1964)--the "father of sociology", who focused entirely on "social facts" rather than "psychological facts"--and those of Kurt Lewin (1936), the originator of modern social psychology, whose analysis of the "psychological lifespace" emphasized individuals' subjective interpretations of their environments.

In Weber's analysis, the critical ideas that led to the rise of capitalism were the religious beliefs and doctrine presented by John Calvin. The principles of Calvinism led individuals on a quest for an ascetic lifestyle in which they dedicated themelves entirely to their "calling"--their every day work roles--in an unending search for "certitudo salutis"--the certainty of salvation. This set of religious precepts gave rise to a distinctly new personality pattern, characterized by a strong commitment to "The Protestant Ethic". For Weber, it was Calvinist thinking and the Protestant Ethic that generated a new personality pattern or value system, driven by one's ascetic devotion to his or her work and, over time, the accumulation of capital among those who subscribed to the Protestant Ethic. Weber's analyses, which compared historical patterns in Western and Asian cultures, suggested that capitalism did not arise in China because the religious precepts of Confucianism were so different from those of Calvinism.

Whereas Marx predicted the eventual withering away of the state, Weber saw a possibly gloomier outgrowth of both capitalist and socialist structures--namely, the rize of routinized, cumbersome bureaucracies that were inimical to the development of charismatic leadership.

Admittedly, I have presented an over-simplified account of Marx' and Weber's theories and, alternatively, have tried only to outline their core assumptions, since these two contrasting theories provide an intriguing backdrop for considering the prospects for sustaining interdisciplinarity in the School of Social Ecology.

Analogies Between Marx's and Weber's Theories and the

Challenges Facing the School of Social Ecology

Marx's theory of history assumes that certain social forces and structures are inevitable, whereas Weber emphasizes the power of generative ideas to alter the course of history. This contrast between materialist and rationalist views of history is analogous to two strikingly different visions of Social Ecology's interdisciplinary future. The materialist view holds that the organizational growth, departmentalization, and bureaucratization will inevitably erode the interdisciplinary qualities of the School. As Social Ecologists at UCI, we are keenly aware of the organizational circumstances that can weaken our commitment to interdisciplinary research, including: (1) the quest to establish strong departmental identities; (2) the spatial separation occasioned by our expansion to two separate buildings; (3) our increasing tendency to work remotely and in isolation from each other via e-mail and telecommuting; and (4) the different teaching loads and budgetary needs associated with the natural and the social sciences

To offset the constraining and fragmenting influence of these organizational forces on interdisciplinary research and teaching, the faculty, staff, and students in Social Ecology implemented several countervailing structures that were intended to reaffirm and strengthen the interdisciplinary mission of the School. Essentially, we tried to establish a wider array of organizational incentives for encouraging cross-disciplinary collaboration. For example:

(a) we made efforts to strengthen Social Ecology's school-wide core curriculum at undergraduate and graduate levels (these are the required courses that introduce our students to the ecological paradigm and principles of interdiscipliinarity);

(b) we established a Task Force on SE's Interdisciplinary Future during Fall, 1990, to reexamine our interdisciplinary mission and develop strategies for strengthening the School's commitment to interdisciplinarity;

(c) we established the Social Ecology Associates Annual Awards Program to highlight interdisciplinary work among students and faculty;

(d) we established cross-departmental "Focused Research Groups" (pertaining to Gang Violence Prevention; International Environmental Decision-Making; Community Health; Health Effects of Exposure to Lead in the Environment; Societal Risk Analysis and Management) to encourage scholarly collaboration across departmental boundaries;

(e) we established a new graduate course on Interdisciplinary Research for our 3rd-5th year Ph.D. students; (see http://eee.uci.edu/97s/51025/) and new senior and freshman seminars focusing on the social ecological perspective;

(f) we developed Social Ecology web sites and listserves--for example, the "Conceptual Social Ecology" web pages (see http://www.uci.edu/~socecol/depart/conse.html); the School-wide online newsletter, "SE Updates", to help reinforce collegial contacts and shared interests, and a sense of community in the School as a whole;

(g) we hired additional faculty members whose research interests and academic degrees span two or more fields/disciplines; and

(h) we encouraged faculty members to affiliate with more than one department in the school (thus we have "primary affiliations", i.e., the department in which a faculty member votes on merits and promotions; and "secondary affiliations" where faculty members participate in departmental meetings but are not voting members in that unit.

The struggle between organizational structures and circumstances that are inimical to cross-disciplinary work, and those that support it, provides only a partial basis for anticipating the fate of Social Ecology's interdisciplinary mission in future years. A key question remains: What ideas, motivations, aspirations, and values account for those organizational structures that either constrain or support interdisciplinary work?

Donald Campbell (1969), in his article on "The Ethnocentrism of Disciplines and the Fish Scale Model of Omniscience", contends that academic disciplines and departments are insular and chauvinistic. To counter these structural forces, individuals who are willing to work at the periphery and across the boundaries of academic departments--i.e., interdisciplinary "bridge-persons"--are required. But where do these somewhat deviant interdisciplinarians come from? What accounts for their atypical behavior?

<div align="center">The Emergence of an "Interdisciplinary Ethic"</div>

An alternative, non-materialist vision of Social Ecology's future is suggested by the concept of an interdisciplinary ethic. I propose this concept as an analogue to Weber's notion of the Protestant Ethic. The interdisciplinary ethic encompasses certain value commitments that may profoundly influence the rise or fall of interdisciplinarity in Social Ecology over the next several years. I am using the term "ethic" in this talk to denote a passionate commitment to a particular world view--namely, interdisciplinarity-- rather than a set of religious beliefs or moral precepts. The interdisciplinary ethic is characterized by its passionate and tenacious qualities, in contrast to a more neutral set of beliefs. It was the interdisciplinary ethic of our founding faculty members that led to the creation of a Social Ecology Program and the development of our core curriculum; and the same set of values guided the faculty and students who served on the Interdisciplinary Task Force during the early 90s and, more recently, the "Rediscoverers" who organized the Graduate Seminar on Interdisciplinary Research during the Spring of 1997 and 1998.

The interdisciplinary commitment of our faculty, students, staff, alumni, and the Social Ecology Associates accounts for the vitality and institutional successes of the School over the past 10 years. Ironically, though, our interdisciplinary ethic is now challenged and even eroded by those same institutional accomplishments-- the attainment of school status, the creation of new departments and specialized degree programs, and the near doubling of our space--which, as we all know, has resulted in greater separation between our department-based faculty, staff, students, and programs. I believe that the interdisciplinary ethic is a very valuable but fragile resource, which will continue to be challenged by the inexorable forces of organizational growth and decentralization.

To effectively cultivate and preserve Social Ecology's commitment to cross-disciplinary teaching and research in the coming years, it is important to identify and strengthen the core values that underlie the interdisciplinary ethic or world view. I suggest that the interdisciplinary ethic is characterized by a commitment to the following core values:

> (a) inclusive rather than exclusionary thinking (social sciences only vs. natural/social sciences; college course on social psychology at U. of Chicago in 1969 co-taught by Tom Crawford and Richard Flacks (Chancellor Aldrich's openness to Arnie Binder's concept of a Social Ecology Program);

(b) broad-gauged, contextually oriented theorizing and research, in contrast with more narrowly circumscribed, reductionist thinking (cf., Jessor, 1958; Moos, 1976; Stokols, 1987, 1996);

(c) methodological pluralism (as reflected in the diversity of our methods courses in SE, encompassing qualitative and quantitative approaches; laboratory-based experimentation as well as non-experimental methods; survey research, environmental assessment, behavioral-mapping, participant observation, epidemiologic as well as individual-level analyses); Does methodological pluralism imply the abandonment of scientific rigor? No, but greater value is placed on use of convergent, multiple methodologies;

(c) optimism and stamina (exemplified by Arnie Binder's dogged determinism and perseverance)

(d) a welcoming orientation toward new perspectives and our colleagues in other schools and departments at UCI; Dan Aldrich--exemplar of kindness, decency--physically towering, august person who was extremely decent in his dealings with everyone

(e) the cultivation of good will and cross-disciplinary tolerance--very underrated, scarce resources in bureaucratic organizations; these values require efforts to promote mutual respect among the proponents of divergent viewpoints; and to listen to and take seriously expressions of dissent so as to learn from them.

Conclusions

Social Ecology is presently at a cross-roads in our organizational development. We've come a long way since 1970 and we face some critical choices during our next phase of development. It is my strong hope that the members of our School will work hard to sustain the interdisciplinary ethic in Social Ecology. As I transition from my administrative duties to a non-administrative role, I pledge to continue to work with all of you in the service of that important goal.

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