

**Travels in Interdisciplinarity:
Exploring Integrative Cultures,
Contexts and Change**

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TO TRAVEL is to engage in an intellectual journey as much about the self as about the "other" and to experience that "other" through a filter of culturally defined meanings and values. Tourism suggests a way of seeing the world but tourist lenses should also be self-reflective as insights and impressions gained are turned back upon the home setting. The "tourist gaze" is thereby fluid, its meanings negotiated and re-defined over time and in different contexts (Urry, 1990).

These ideas underlie my recent travels into the realm of interdisciplinarity. At Carleton University, we are currently exploring alternatives for undergraduate program development in interdisciplinary social science. As part of this process I have visited interdisciplinary programs at three institutions; Wayne State, San Francisco State and Miami Universities. In this paper I ponder aspects of these interdisciplinary experiences considering first curricular and then administrative issues. Subsequently, I connect site experiences with the Carleton context. In conclusion, I contemplate issues in interdisciplinary studies more generally while also noting differences between higher education in the United States and Canada that might influence our respective interdisciplinary approaches.

Inevitably, interdisciplinarity carries different meanings for different people. My professional introduction to interdisciplinary studies began with the 1994 conference of the Association for Integrative Studies. I have, however, been an informal interdisciplinarian for most of my academic life. My undergraduate degree combined specializations in French literature and geography and my graduate career, although ostensibly in human geography, integrated perspectives spanning the social sciences and humanities. Now working in both geography and interdisciplinary social science, I cannot in consequence separate interdisciplinarity from knowledge constructions, theoretical formulations and, of course, disciplinary affiliations.

Correspondingly, however, such notions now intersect with a range of other issues. In light of the site visits interdisciplinarity is also allied with particular people and institutional settings. The Detroit inner city is juxtaposed with residential San Francisco, and both are compared with Oxford, Ohio, a red brick embodiment of the quintessential American college town. The faces of adult students, commuter students and more traditional residential students feature too. And finally, there are faculty, student services personnel and administrators conveying versions of interdisciplinarity that are often institutionally specific, reflecting a local cultural politics.

As I began my journey into interdisciplinarity, I held certain expectations and preconceived notions. While reinforcing some of these ideas, my travels also shattered others, making me question the bases of my own disciplinary and interdisciplinary understandings. By extension, the site visit experiences forced me to re-examine my views on program formulation and development. Considering first curriculum issues, it is this nexus between individual and collective experiences that I now address.

Designing the Integrative Curriculum

Although interdisciplinary initiatives usually originate from perceptions of the benefits of interdisciplinary studies, the philosophical, theoretical and pedagogical bases of such studies are sometimes less well-defined. Hence, despite good intentions, the resulting curriculum may not fulfill anticipated interdisciplinary goals. From these perspectives and the recognition that we could learn much from institutions more experienced in interdisciplinarity generally and curriculum issues in particular, the Dean of Social Sciences at Carleton University, Professor Tom Wilkinson, supported several exploratory site visits.

Institutions visited were selected based on programs offered (and relationship to interdisciplinary social science specifically), length of time established, and faculty availability to coordinate a site visit itinerary. As noted above, three case examples were chosen: the Interdisciplinary Studies Program (ISP), College of Lifelong Learning at Wayne State University (Detroit); the Social Science Program at San Francisco State University; and the Western College Program, School of Interdisciplinary Studies at Miami University (Oxford, Ohio). During the winter and spring of 1995 I spent approximately a week at each institution and throughout that time attended classes and meetings, and spoke with faculty, administrators, students and, at Wayne State, student services personnel.

Although I am at present concerned primarily with curriculum, I must emphasize that it is often difficult to separate curricular questions from administrative and associated faculty development matters. In this light, however, and as related to curriculum specifically, several questions shaped site visit agendas. First, how might an interdisciplinary curriculum be developed and how might it differ in response to changing student needs? Carleton University has numerous adult and part-time learners, but such groups are integrated with more traditional college students enrolled in full-time degree programs. From these perspectives, we wanted to compare and contrast how other institutions have designed interdisciplinary curricula. And by extension, we needed to identify how extant programs implemented interdisciplinary classroom teaching. How, for example, were relationships between disciplinary and interdisciplinary studies conveyed in undergraduate courses? Were interdisciplinary program requirements juxtaposed with more conventional disciplinary offerings taken elsewhere? And, not least, how might interdisciplinary approaches be tailored to a social science initiative? Given our institutional interest, this question was, of course, paramount. We needed to assess social science curricula and individual courses with particular care, examining how reading, writing and thinking across the disciplines functioned in social science contexts.

Extant models. The institutions visited presented a range of interdisciplinary curricula. The Wayne State program caters to adult learners and includes both B.A. and M.A. degrees in interdisciplinary studies. At the undergraduate level, students select courses from Social Science, Humanities, and Science and Technology streams and follow an integrated sequence of core and elective courses culminating in a senior essay/project or seminar. In the School of Interdisciplinary Studies at Miami University, the curriculum is an undergraduate one and also spans these similarly defined groupings. Students take the majority of their required interdisciplinary courses in the first two years and thereafter, specialized seminars and a year-long senior project meet interdisciplinary requirements (see also Newell 1992). As related to ultimate career goals, students design the remainder of their degree programs from disciplinary electives offered elsewhere in the university. Furthermore, unlike Wayne State, Miami students are primarily of traditional college age and, for the first two years, the interdisciplinary experience is that of a residential college comprising a small-scale living and learning environment.

Amongst the interdisciplinary offerings at San Francisco State University, there is one specific to the social sciences. Established in the mid 1960's, the Social Science Program has taken different guises, primarily in response to political trends within the larger university. Bachelor's and Master's degrees as well as a minor in social science are offered. For undergraduates, the program is structured around two junior level core courses, followed by senior interdisciplinary methodology and project seminars. Correspondingly, students must take a number of upper division courses in the social sciences and related fields chosen to complement their interests and career goals. The student population at San Francisco State is diverse and hence the Social Science Program serves both adult and traditional students. For the most part, however, students commute to campus and juxtapose university studies with paid employment.

Fundamentally, the programs considered are linked ideologically in their commitment to interdisciplinary studies expressed via an integrated curriculum. To this end, and to a greater or lesser degree, each curriculum derives from the premise that integration of diverse disciplinary perspectives will foster student awareness of knowledge constructs greater than that of their constituent disciplinary parts. And, in each program, critical thinking and writing skills are given special emphasis; the latter supported frequently by specialized writing centers and/or related faculty initiatives.

In practice, however, meanings of interdisciplinarity shift both between and within individual programs. And, as expressed via course curricula, the relationship between disciplines and interdisciplinarity is an apt illustration of this situation. Correspondingly, however, this issue also raises questions about understandings of interdisciplinary more generally, and relationships between theoretical precepts and classroom practices.

Contested meanings, shifting terrains. Much of the scholarly literature on interdisciplinarity addresses the role of disciplines within interdisciplinary study (selected examples include Klein, 1990, 1993; Newell, 1990, 1992; Swohoda, 1979). As Newell (1990), for instance, notes:

It is important for interdisciplinarians to keep in mind the value of the disciplines . . . The disciplines can provide valuable insight into the complexity of an issue as a whole . . . To ignore the disciplines . . . is to ignore the accumulated wisdom of different approaches to understanding as well as the specific insights they afford, (p.73)

From this perspective, it is evident that disciplinary and interdisciplinary understandings are fundamentally interconnected. Indeed, interdisciplinary appreciation emerges in part from awareness of disciplinary contributions—not least, from familiarity with the languages and assumptions underlying particular disciplinary ways of knowing. As the site visits demonstrated, however, integrative curricula synthesizing disciplinary insights to foster interdisciplinary understandings may appear similar, but may also be practised in somewhat different ways.

In the Interdisciplinary Studies Program at Wayne State University beginning students take a practical approach to interdisciplinarity, examining particular disciplinary practices in both print and visual forms and assessing, at various levels, how and why they might be integrated. Individual courses are frequently oriented around integrated topics or themes. At Miami, core freshman classes in the Western College Program are also structured thematically around a particular topic, question or issue; as different perspectives are brought to bear on the problem at hand, students again juxtapose contrasting and complementary intellectual traditions, thereby gaining multiple perspectives on a single problem.

The San Francisco State strategy offers yet another illustration of this approach. Within a social science context, students are introduced to three or four disciplinary world views and compare

and contrast such perspectives *vis a vis* selected aspects of human behaviour, social and cultural interactions, and topical global problems. Approaches to interdisciplinary integration are given special emphasis and course materials encourage students to identify disciplinary strengths and weaknesses, and to examine how particular knowledge constructs transcend disciplinary boundaries.

Conceptually, these programs share similar views on relationships between disciplines and interdisciplinarity. In practice, however, curricular approaches to interdisciplinary studies look somewhat different and such differences may be traced in part to divergent student profiles and needs. At San Francisco State University, the Social Science Program core courses serve its own majors, Liberal Studies majors who are commonly pursuing the multiple subjects credential in elementary education, and students seeking to satisfy an upper division general education requirement in "relationships of knowledge." In this sense, the courses have become institutionalized by serving students drawn from across the university. At Wayne State by contrast, the interdisciplinary studies program emerged from a weekend college initiative for adult learners. Hence, the present curriculum is tailored specifically to the special needs of a mature student population and, as a result, draws on the rich life experiences that such learners bring to university studies. Finally, the School of Interdisciplinary Studies at Miami has its origins in the former Western College for Women. Interdisciplinarity has thus been in part a vehicle through which to maintain a small-scale residential learning environment catering to traditional students, many of whom later pursue graduate work or seek accreditation in a profession.

In addition to reflecting differences in student profile, curricular differences between programs—how relationships between disciplines and interdisciplinarity function in classroom practice—reflect differences in faculty commitment to and understanding of interdisciplinary study. It is only recently that consistent definitions of interdisciplinarity have been widely recognized, and comprehensive guidelines for curriculum planning and development presented (see for example Association for Integrative Studies and Institute in Integrative Studies 1994). Even in established programs, the interdisciplinary curriculum evolves as faculty seek new ways to enhance and/or to facilitate integrative processes. Indeed, based on my site visit experiences, ongoing curricular evolution seems essential. Where it does not occur, the delicate balance between disciplinary and interdisciplinary studies is lost.

In light of the program visits, this issue of balance is, in my opinion, one of the greatest curricular challenges faced by interdisciplinary initiatives. Since curricular shape reflects not only institutional structure, but also individual faculty personalities and interests, there must be consensus amongst those concerned with curriculum about the meanings and implications of interdisciplinary studies generally, and how disciplinary and interdisciplinary insights can most effectively be conveyed to diverse learner groups. At each institution, such issues pervaded not only course and program structures, but also emerged in individual meetings with faculty and students.

In terms of course structure alone, the site visits demonstrated that extent of disciplinary synthesis can differ substantially between course sections, an identical curricular mandate or team teaching situation notwithstanding. Indeed, at each institution some faculty even distanced themselves from formal interdisciplinary ideologies and theoretical practices. For students too, interdisciplinary studies were interpreted in different ways. In certain instances, I even questioned whether students were in fact drawn to interdisciplinarity as such, or were attracted instead to by-products of an interdisciplinary education, some of which were institutionally specific like adult or small-scale residential learning.

These points are in no way meant to discredit or detract from extant models of interdisciplinary education and my purpose here is not to ascribe particular strengths or

weaknesses to individual programs. Rather, such matters highlight issues in interdisciplinarity extending beyond curricular concerns. By definition, discrete interdisciplinary programs serve different student populations and are conceived within different institutional cultures. Likewise, they involve different players with possibly divergent agendas. Contested meanings and shifting terrains are inevitable reflections of disciplinary as well as interdisciplinary studies. In the context of interdisciplinary work, however, such curricular issues are linked ultimately with administrative structures and policies. It is to these themes that I now turn.

Interdisciplinary Administration

If curricular questions constitute an often contested terrain within university communities, administrative matters may invoke even more vigorous discussion. As each site visit highlighted reactions to interdisciplinary studies within universities at large, together they illustrated approaches to interdisciplinary administration.

In exploring options for interdisciplinary program development in the social sciences at Carleton University, administrative issues are particularly significant. As the site visits demonstrated, the curricular benefits of interdisciplinary studies depend in part upon strong and visionary leadership that manifests a commitment to and understanding of interdisciplinary practices. Thus, in teaming from the extant programs, we focused on several interconnected questions. First, in structural terms, how might administration of interdisciplinary programs differ from that of more conventional disciplinary offerings? Are there particular problems or issues unique to interdisciplinary administration? And finally, how have administrative approaches to interdisciplinarity changed over time and why might new frameworks be implemented?

Via the site visits, meetings with faculty, administrators and, at Wayne State, student services personnel helped to address such questions. Once again, I must emphasize that curricular issues are often closely linked with administrative processes. In the present context, however, I focus on administrative structures and strategies, paying particular attention to the dynamics (and dialectics) of such aspects of interdisciplinary discourse.

Unlike curricular and related intellectual issues, interdisciplinary administration has received less attention, at least in the scholarly literature (although exceptions include Armstrong, 1980; Trow, 1984-85; Hershberg, 1988; Casey, 1990). Correspondingly, however, individual program archives and associated faculty narratives offer insights into administrative practice. Such sources inform arguments developed here.

Extant models. Since interdisciplinary programs offer alternatives to traditional disciplinary initiatives, they are often scrutinized closely by those elsewhere in the academy. Such scrutiny derives from intellectual concerns as well as from the taken-for-granted disciplinary administrative structures that have characterized North American universities throughout much of the twentieth century. Each of the programs I visited has and, in some cases, continues to confront questions that impinge upon its autonomy and academic identity. In turn, and to a greater or lesser degree, such issues fall within administrative realms. Looking first at the administrative frameworks characterizing each program, I then consider how they have influenced interdisciplinary programming generally.

Both the Interdisciplinary Studies Program (Wayne State) and the Western College Program, School of Interdisciplinary Studies (Miami) have considerable administrative autonomy. These programs are housed in colleges geographically and, to some extent, administratively separate from the larger university.

At Wayne State, the Interdisciplinary Studies Program is part of the College of Lifelong

Learning and the program director also serves as an Associate College Dean. Within the ISP, faculty are grouped into divisions including Humanities, Social Sciences, Science and Technology, and Graduate Studies. These units oversee curricular and administrative matters that impinge directly upon divisional interests and, as appropriate, convey such issues to either an all-staff meeting, the program director or other administrative body. More formal curricular issues and proposals are channelled through a curriculum committee which then reports to a Council of Coordinators including the program director and representatives from various faculty divisions. This Council also keeps an ongoing check on a range of other program-related administrative issues. Program work overall is supported by a Marketing/Recruitment Committee responsible for, amongst other things, collecting graduate assessment data, organizing promotional activities and prospective student canvassing. Finally, the program also encompasses an active Student Services Unit offering personal, academic and career counselling to interdisciplinary studies students.

At Wayne State, the Interdisciplinary Studies Program is characterized by an integrated and multi-layered administrative framework. All-staff meetings are a forum where major program issues are considered by the interdisciplinary community as a whole. Yet, the cohesive and comprehensive network of supporting administrative units ensures that important questions are discussed elsewhere before presentation to an all-staff council. In this way, the ISP functions somewhat like a disciplinary department. At the same time, committee compositions and interrelationships appear to replicate, administratively, implicitly integrative goals.

Some of the unique administrative features of the Interdisciplinary Studies Program at Wayne State undoubtedly reflect their particular concern for adult learners: specifically, the existence of a Student Services unit tied directly to program needs. Correspondingly, though, the clearly defined committee structure and decisive leadership that together characterize this program also foster coherent consideration of long-term program goals and attendant implications. By definition, interdisciplinary studies are especially vulnerable to divisive and fragmenting forces. In this sense, the ISP model at Wayne State aptly demonstrates the importance of a strong and efficiently organized administrative structure to overall program maintenance and evolution.

As noted above, the School of Interdisciplinary Studies at Miami University is also structured in a college format. And, at Miami too the college functions somewhat like a departmental unit although headed by a Dean rather than Chair. Furthermore, at Miami the interdisciplinary studies initiative constitutes the college whereas at Wayne State, the ISP is a unit within the College of Lifelong Learning. Other differences reflect faculty size and student population. At Miami, the Western College Program has just over a dozen faculty members; the ISP at Wayne State counts more than twenty. And, as a function of the small scale residential learning environment, Miami students are primarily of traditional college age and are more closely connected with the University as a whole. Hence, there is less need for a specialized student services division.

I visited Miami near the end of the Spring semester; so my opportunities to consider interdisciplinary administration were not as great there as at Wayne State or San Francisco State. Still, the extant program points once again to the necessity for strong administrative leadership and clear identification and inter-faculty discussion of long-term program goals. Clearly, such administrative vision is essential if the objectives of interdisciplinary education and, correspondingly, future program evolution are to be realized and managed effectively.

My visit to the Social Science Program at San Francisco State University highlighted comparable issues. From an administrative point of view, this program is especially interesting because throughout its history, stemming from origins in the San Francisco State College of the 1950's, it encompasses several models of interdisciplinary administration. In transition once again, the Social Science Program aptly illustrates some of the special challenges faced by

interdisciplinary initiatives with less autonomy than that provided by a discrete college entity.

At San Francisco State, the Division of Social Science emerged before formal disciplinary departments were established and it was closely linked with interdisciplinary general education. In the 1960's with the hiring of faculty specifically interested in interdisciplinary social science, B.A. and M.A. degrees were conceived. Since that time, however, the program has experienced various curricular and administrative changes (see also Miller, 1994). It has, for example, been construed both as a department-like body within a Division of Cross-Disciplinary Programs and, more recently, as a unit within a Center for Interdisciplinary Programs. The Social Science Program has also been instrumental in generating diverse interdisciplinary initiatives—urban, ethnic and human sexuality studies, for instance—that have subsequently become autonomous academic units or integrated into existing departments. In part, these changes reflect a local political culture that has much to do with pressure from extant disciplines and concerns over resource allocation. Correspondingly, however, shifting administrative frameworks point to a larger concern; namely the importance of consistent support from a higher level administration committed to interdisciplinary studies.

From this perspective, the San Francisco State experience offers graphic illustration of the range of political discourses that accompany administration of interdisciplinary initiatives. When the Division of Cross-Disciplinary Programs was abolished and replaced by a Center for Interdisciplinary Programs, administrative issues and leadership questions became singularly important. As a result of that process of dissolution, the program lost some of its focus and alternative administrative strategies are still being sought. During my site visit, options being considered included amalgamation with a disciplinary department or re-constituted leadership under an Associate Dean.

Together, the three programs visited also highlight questions of faculty affiliation. At Miami and Wayne State Universities, faculty are hired directly into interdisciplinary studies. In the case of San Francisco State, faculty have traditionally been appointed into interdisciplinary Social Science but joint appointments have featured too. In the latter case, experience suggests that joint appointments can only work effectively in conjunction with some permanent faculty and, perhaps most importantly, a supportive administration allocating consistent teaching and other resources to the interdisciplinary endeavour. Not least, faculty contributions to the interdisciplinary program must be clearly identified as part of annual reviews and tenure and promotion decisions.

Administrative cultures. These individual models of interdisciplinary administration are to some extent institutionally specific. Yet, collectively they offer important insights to the administrative challenges faced by interdisciplinary programs generally.

First, although it may perhaps seem contradictory to institutionalize an interdisciplinary program via a department framework, the programs considered here have, at various times, adopted aspects of departmental administration to safeguard both immediate and long-term program goals. As the Wayne State experience shows, elements of departmental structure can fruitfully be adopted in interdisciplinary contexts. And, in such instances, the integrative philosophies underlying curricular matters are also applied to administrative coordination.

Secondly, administration of interdisciplinary programs differs from that of more conventional disciplinary offerings. By nature, interdisciplinarity brings multiple perspectives to bear on curricular and administrative issues. Thus, from an administrative point of view, the site visit experiences demonstrated that threats to interdisciplinary autonomy lie in part in the potential for divisiveness and fragmentation already extant within programs, which may also shape interactions with the larger university community.

Finally, and to reiterate, strong leadership and continued support from the higher level

administration are integral to successful interdisciplinary programming. Similarly crucial are widely shared understandings of the range of political discourses that impinge upon interdisciplinary initiatives. As a function of the numerous players involved, these political agendas constitute a greater administrative burden where interdisciplinarity is concerned than they do in more conventional disciplinary programs.

Such administrative issues are discussed within individual institutions amongst concerned faculty. But to date, there has been little reflection in the scholarly literature about ongoing administrative practices. As a substantive part of the interdisciplinary endeavour, administrative questions beg further development. Based upon the site visit experiences, it is generally evident that more collective and cross-program dialogue is needed. In this light, and integrating curricular and administrative issues into another context, I want to focus now on the Carleton University setting.

Border Crossings: Interdisciplinarity at a Canadian University

Like some of their American counterparts, many Canadian universities are currently engaged in program and policy reviews. As public institutions facing continued government funding cuts, they must treat as singularly important the reassessment of student needs and how such needs can best be met given fewer financial resources. At Carleton University as elsewhere, such issues are being conceptualized and addressed in different ways. Carleton, however, has a tradition of interdisciplinary initiatives and thus "interdisciplinarity" enters frequently into discussions of undergraduate programming and academic restructuring.

Amongst Canadian universities, Carleton is a medium sized institution with approximately 22,000 full and part-time students. Created in 1942, the University traces its growth to the post Second World War period. In the early years, Carleton catered in part to returning war veterans, thereby making advanced education accessible to adult learners. Today, Carleton is primarily a commuter university with a mix of adult as well as more traditional students who are at the undergraduate level, drawn largely from eastern and southern Ontario.

The university offers a range of degree programs spanning faculties of Arts (Humanities), Social Sciences, Science, Engineering and Graduate Studies and Research. Within these disparate faculties, there are a number of interdisciplinary programs and related initiatives including but not limited to Environmental Studies, International Affairs, Canadian Studies and Women's Studies. Housed in the Arts Faculty, an Institute for Interdisciplinary Studies also sponsors some undergraduate interdisciplinary programs as well as a Directed Interdisciplinary Studies major.

At Carleton, some of the existing interdisciplinary initiatives are either specific to the Faculty of Social Sciences or include social science course components. Correspondingly, however, the senior administration is contemplating the role of interdisciplinarity within the university more generally and, as is my focus here, within the social sciences in particular. Thus, as described above, an aim of my institutional site visits was to explore possibilities for interdisciplinary study in the social sciences addressing social scientific enquiry as a whole, rather than via potentially interdisciplinary parts (Women's Studies, for instance).

Like the Interdisciplinary Studies Program at Wayne State University, Carleton has a significant number of adult learners. As at San Francisco State, most Carleton students commute to campus, often combining university studies with paid employment. And, while the Carleton context is much different from that of Miami with its small-scale residential learning model, some of our aims—critical thinking and writing across the disciplines are much the same. The question therefore becomes: as we at Carleton consider possibilities for interdisciplinary

programs in the social sciences, how might we draw on other program experiences to forge an interdisciplinary initiative that meets our particular institutional needs?

Foundations. At Carleton, a first course in interdisciplinary social science was approved by the University Senate in January 1995 and is being taught for the first time in the 1995-1996 academic year. Limited to first year students concurrently registered in at least one other introductory level social science course, and with a pilot enrollment of sixty, this full year (September-April) course offers an introduction to social science inquiry and related interdisciplinary analysis. Development of critical thinking skills, and reading, writing and research practice across social science disciplines are given particular emphasis.

In formulating course structure, class size was a key difference between Carleton and the institutions visited. Even in courses where multiple sections are offered, enrollment in introductory (freshman) courses currently runs at upwards of 200 students. Furthermore, many sections and/or courses are taught on ITV, the university's instructional cable television channel. This situation creates yet another learning milieu, one that might seem similarly incompatible with the small-group learning goals associated with interdisciplinary studies. In looking at the other institutions closely, however, it is clear that interdisciplinary studies have been delivered in diverse ways and in response to a range of institutional cultures and contexts. Thus, while in developing a first course we can learn much from other institutional examples, we must also innovate to incorporate interdisciplinary principles into our specific educational setting.

As now constituted, the class of sixty students meets together twice a week for two one hour lecture sessions. At the same time, however, the classroom cohort has been divided into four groups of approximately fifteen students each, who gather in weekly two hour workshops under the direction of graduate teaching assistants and a faculty coordinator. Much like laboratory sessions in conventional science courses, these workshops provide opportunities for students to carry out a range of applied interdisciplinary social scientific activities. Inspired by a Wayne State strategy, for example, video textual analysis is used to illustrate processes of interdisciplinary synthesis. As at San Francisco State, both lecture and workshop settings provide a forum wherein different disciplinary ways of knowing a particular problem or issue are compared and contrasted. And, as in the Western College Program at Miami, students are offered a setting within which to examine notions of social responsibility and, from a social scientific perspective, aspects of diversity both inside and beyond the academy.

The workshops are thus crucial to this introductory experience in interdisciplinary social science, for they both support lecture topics and provide a venue where small group learning can occur. From these perspectives, then, it is in the workshops where students grapple practically with reading and writing across disciplines and with "real world" implications of social scientific enquiry. And, even if an ITV section of the course is later added, these on-campus workshops would be retained.

In developing and refining course curricula, other institutional experiences have been invaluable. Being new to teaching about interdisciplinarity, it was only through talking with faculty and students elsewhere that I gained a sense of how interdisciplinary concepts can most effectively be communicated to undergraduates. As a result of such discussions, we at Carleton decided to experiment with a thematic approach, drawing curricular inspiration from concepts of community in the social sciences and links between universities and societies. Furthermore, it was student dialogue that illustrated graphically how interdisciplinary approaches may (or may not) filter down to the undergraduate world view and, through such dialogue, I enhanced my understanding of how we as educators can best facilitate students' acquisition of interdisciplinary skills. In initial stages, for example, relating interdisciplinary concepts to students' life experiences seems essential. From such a basis, students can then more easily

move on to apply interdisciplinary synthesis to scholarly contexts.

The site visits also highlighted curricular materials for interdisciplinary study in the social sciences and, in classroom situations, individual faculty modelled integrative teaching techniques. Perhaps more importantly, however, the programs visited also helped shape ideas about how we at Carleton might develop interdisciplinary social science beyond the introductory level.

Possible futures. This first course, "03.100, Introduction to Social Sciences," is an initiative of the Office of the Dean of Social Sciences. It is thus supported by the Dean and Associate Dean for Undergraduate Academic Affairs and by two administrative committees: a review committee responsible for financial and related resource issues and a curriculum committee concerned with curriculum planning and development. Both committees draw members from across the Faculty of Social Sciences and include representatives from a number of individual departments and units. At present, the project also encompasses myself as director and a research associate, both appointed in conjunction with disciplinary departments and with varying responsibilities to those units. From this basis, and in light of the site visits, we are thus exploring, in the long-term, how we might incorporate our extant structures, resources and institutional precedents into a comprehensive program in interdisciplinary social science.

Each site visit demonstrated conclusively that it is essential to launch a first course successfully before proceeding with more extensive program development. In Canadian universities, especially where interdisciplinary studies are in most cases a relatively new phenomenon, and in the absence of the liberal studies or general education components that feature in American higher education, a successful first course is particularly crucial. Building on a course in progress, however, there are numerous possibilities for a subsequent interdisciplinary venture. It is to consideration of such issues that I now turn.

Each institution visited offered some version of interdisciplinary social science. At Wayne State and Miami Universities, interdisciplinary study in the social sciences is incorporated into a larger degree program also spanning the humanities, natural sciences and/or science and technology. By contrast, San Francisco State provides a specific model for a social science degree program. In each case, however, interdisciplinary social science follows a particular pattern: one oriented around a series of sequentially linked core courses.

At Carleton University, a series of core social science courses would also work well. Building on the introductory course, we might envision a social science concentration encompassing two second year (sophomore) half courses in selected topics in social science systems, followed by a third year (junior) seminar in interdisciplinary research methodologies and practice. Two half course final year (senior) or capstone seminars would focus on social science theory and links between theoretical and methodological approaches in social scientific analysis. A complementary senior project course would complete the concentration, enabling students under faculty supervision to apply interdisciplinary analysis to an independent research project.

Following and to some extent integrating the extant models, this kind of curricular concentration should enable students to make connections between disciplines that are currently lacking in most of our conventional disciplinary programs. Furthermore, it would offer undergraduates new ways of thinking about social worlds and how social scientific inquiry extends well beyond artificially constructed disciplinary boundaries (on related points see Miller, 1982; Slembert, 1994).

In the Canadian context, though, graduate school admission remains contingent primarily upon completion of an honors (or equivalent) undergraduate program with one or more disciplinary specializations. For this reason, development of an interdisciplinary program at a Canadian university raises slightly different issues than those suggested by the American

institutions visited. Given faculty and university cultures in Canada, a proposal for an independent degree program in interdisciplinary social science would inevitably be construed as taking curricular innovation to an opposite extreme. In other words, although interdisciplinary studies would be seen as providing essential integrative skills, important questions would also be raised about losing aspects of specialization required for graduate school admission.

From different perspectives, this argument about depth versus breadth was a familiar one at each institution visited and, I would argue, characterizes interdisciplinary studies generally. I do not want to rehearse this well charted ground yet again, for such issues have been amply discussed elsewhere (see for example parts of the exchange between Benson, 1982, and Newell, 1983). In the Carleton context, however, and in relation to a specialized initiative in the social sciences particularly, questions of curricular balance are singularly important. From this stance, a concentration in interdisciplinary social science would probably be most successful if proposed initially to complement existing disciplinary offerings. A disciplinary focus would still ensure graduate school admission but concurrent completion of an interdisciplinary component would provide the integrative skills and broader picture that are a necessary but as yet an ill-defined part of many of our undergraduate programs.

Linked with curricular issues are, of course, questions of appropriate administration. Any administrative framework, however, will emerge in part from the degree program or curricular concentration proposed. As demonstrated by the site visit experiences, particular administrative strategies must be invoked to support, enhance and even protect the interdisciplinary curriculum. At Carleton, and with a mandate for interdisciplinary study limited to the social sciences, the college format would demand special scrutiny. There is limited institutional precedent for this kind of organizational structure and, where the college unit has been adopted, as at Wayne State and Miami, it houses a general interdisciplinary studies program extending beyond the social sciences.

For a smaller scale initiative, then, the San Francisco State experience is instructive. First, it highlights the idea that a department-like body is helpful in institutionalizing the goals and long-term objectives of the interdisciplinary endeavour. Given the prevailing Canadian university climate and understandable concerns over diminishing resources, a clearly defined administrative unit with department-like powers would be essential. Secondly, and in light of the site visits, it seems evident that some faculty should be appointed directly into the interdisciplinary program. In the case of joint appointments, individual responsibilities must be identified formally so as to minimize the potential for future misunderstanding amongst units involved. And finally, it would be beneficial in the long-term if some interdisciplinary courses became part of other programs' requirements. If particular courses are institutionalized in this way the interdisciplinary initiative gains a higher profile within the university community and, with such external investment, it is less vulnerable to fragmentation and possible dissolution.

In exploring possibilities for program formulation at Carleton, we have learned and continue to learn much from other institutional experiences. Any proposal that we might ultimately develop should therefore be informed by interpretations of extant models. In this sense, the site visits were extraordinarily validating. As formally presented, models of interdisciplinary curricula and administration seem static and may be idealized. Site experiences, however, suggested that even established interdisciplinary programs confront issues and questions similar to those that we have faced already and indeed may anticipate if we proceed further with a program proposal and implementation.

Via the site visits, I have gained new awareness of the extent to which interdisciplinarity remains a contested terrain. Yet, if interdisciplinary study is about the integration of multiple perspectives, it is perhaps not surprising that such perspectives and their curricular and administrative expressions should be continuously negotiated and re-defined. At Carleton, our

task would be to define clearly our own perspectives and, on that basis, to shape curricular and administrative frameworks that would meet student, faculty and institutional needs. In the process and as related to established models, we might thereby also foster new versions of, and strategies for, interdisciplinary programming.

Conclusions

If change is an ultimate constant, how we manage it will influence the successive futures we forge. In a related vein, T.S. Eliot offers a thoughtful aphorism: "We shall not cease from exploration/And the end of all our exploring/Will be to arrive where we started/And to know the place for the first time" (1975, p.2552). My "travels in interdisciplinarity" may be similarly interpreted. As a "tourist" my mandate was to explore the "other"—in this case three established interdisciplinary programs. Via such explorations, however, I gained new understandings of both myself as an interdisciplinarian and the academic contexts to which I belong.

The site visits highlighted a range of both curricular and administrative issues that apply to the Carleton context as much as to those from which they may derive. My consideration of interdisciplinarity as practised at other institutions, however, yielded insights that extend beyond questions of program planning, curriculum development and policy. Specifically, although I began with a working definition of interdisciplinary studies, comparative assessment of three program models has led me to re-evaluate my own intellectual constructs and interdisciplinary views.

There are, for example, certain differences between post-secondary education in the United States and Canada. Although I alluded to some of these differences above, I return briefly to such issues here because they may influence our respective views of interdisciplinary activity. Discrepancies in funding and institutional structure aside, intellectual heritage is also significant. In Canada, many of our university traditions derive from relatively recent British precedent. This situation is not surprising since Canada is a former British colony and continuing member of the British Commonwealth, and many Canadian faculty were trained in the United Kingdom. In the British model, and despite a recent move toward cultural studies and social theory, early disciplinary specialization prevails. As transferred to Canada, disciplinary degrees with complementary electives have dominated undergraduate programming. Where interdisciplinarity is concerned and at the undergraduate level particularly, it is thus more likely to be considered in conjunction with existing disciplinary degrees rather than as an independent alternative to such programs.

These institutional and intellectual legacies are embedded in my own academic identity, one that encompasses work in both Canada and Britain. Hence the site visit experiences and, in particular, discussions with faculty and students have led me to re-examine interconnections between my own disciplinary and interdisciplinary understandings. Many aspects of geography are highly interdisciplinary. Yet, dependent upon institutional context, geography may be either supremely integrated or highly fragmented. From such perspectives, the site visits enhanced my appreciation of my own shifting academic roles spanning the multiple and multifaceted worlds of disciplinary and integrative study, and colonial and post-colonial university traditions.

Finally, as I have suggested throughout this essay, consideration of extant interdisciplinary programs has highlighted the vitality and changing parameters of such scholarly activities. As more disciplinary programs implement interdisciplinary components, new questions must be asked about the place of discrete interdisciplinary units within the academy. Specifically, what administrative and curricular frameworks will take interdisciplinarity forward into the universities and colleges of the Twenty-First Century? And, perhaps most importantly, what philosophies will support new versions of interdisciplinary study carried out within but, by

virtue of new electronic media, also across institutional cultures and contexts?

Ultimately, my "travels in interdisciplinarity" were self-reflective journeys. In learning about the "other" I was compelled to turn the touristic gaze back upon myself and my own integrative constructs. As practiced at Wayne State, Miami, and San Francisco State Universities, interdisciplinary study encompasses both remarkable similarities and tremendous differences. In this sense, interdisciplinarity is fundamentally a social-cultural and to some extent institutionally specific construct. Correspondingly, however, interdisciplinarity also seems to be as much a personal journey as a collective enterprise, and as much a statement of being as a single intellectual persona. Travels in interdisciplinarity invite a re-examination of both scholarly identity and academic custom. And, if such travels are fruitful, neither the academy nor academics can be viewed in quite the same way ever again.

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