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Introduction to Free Space: Reconsidering Interdisciplinary Theory and Practice

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University: A place in which a civilization's knowledge is divided up into exclusive territories. The principal occupation of the academic community is to invent dialects sufficiently hermetic to prevent knowledge from passing between territories. By maintaining a constant flow of written material among the specialists of each group they are able to assert the acceptable technique of communication intended to prevent communications. This in turn establishes a standard which allows them to dismiss those who seek to communicate through generally accessible language as dilettantes, deformers or popularizers.¹

Interdisciplinarity is another term fast fading from the higher education lexicon. It was always more a feature of the discourse of higher education than of its practice; but now it is disappearing even from the language of the higher education community. Sporadic attempts have been made to breathe life back into the idea but the task is now fruitless. The world of higher education has moved on and, with it, the idea of interdisciplinarity has almost disappeared.²

These two observations on the university, the first by John Ralston Saul and the second by Ronald Barnett, were both written ten years ago. On the surface, they seem to contradict each other. On the one hand, John Ralston Saul despairs of the insularity of disciplines and of the discourse that serves to protect and isolate knowledge from access, critique, and development. On the other, Ronald Barnett announces the end of the very process designed to resist and dismantle that isolation. Ten years later, we might be inclined to think that Barnett was simply wrong, that in fact the insularity of disciplines has continued, and that the answer continues to be some version of interdisciplinarity.

And yet, while these two statements seem to be in tension, in reality they are not. Barnett's point is that interdisciplinarity has actually reinforced disciplinary isolation. Interdisciplinarity

really just allows disciplines to be secure in their own territory and therefore reinforces the fragmentation of knowledge. He calls for the recognition that the separation of disciplines was always an artificial act, and that as education matures in its relationship to society, society demands that the boundaries break down. Disciplinary fiefdoms are endangered. Interdisciplinarity (i) accepted the presence of disciplines as a fact of academic life, and (ii) endorsed disciplines as the building blocks of university programs. However, traditional disciplinary values and priorities are less of a fact in the academic world as programs have shifted focus from the construction of knowledge to the development of skills (e.g., enterprise skills, communication skills, information technology skills, interpersonal skills, critical thinking skills, and the like). As the naturalness of disciplinarity is questioned, the status of disciplines as the only source of university programs likewise becomes dubious.

So, in one sense, interdisciplinarity reinforces the illusion that disciplinary knowledge is somehow natural. But does this then mean that we can give up on the concept of interdisciplinarity altogether? It seems more likely that new attention must be given to the ways in which knowledge is produced, recognizing the contingent historical fact of disciplinarity while not supposing that disciplinary knowledge is natural and that the knowledge that emerges from between disciplines is merely an afterthought.

Ten years after these comments were written by Saul and Barnett, we are still faced with the problem of interdisciplinarity. Saul's cynical comments may be exaggerated for effect, but it still remains true that specialist disciplinary knowledge seems to be the gold standard within the university. A great deal of lip service is given to interdisciplinarity, often by administrators who still see it as saleable to granting agencies and the public. And yet, newly minted PhDs coming into their first faculty position often find that their enthusiasm for interdisciplinary work is dampened by the centripetal forces of disciplinary knowledge production and the obligations that come with membership in a department. On the other hand, Barnett's prediction simply seems premature — while interdisciplinarity may strengthen disciplinary regimes, it has hardly faded from the higher education lexicon. It may be because we have not yet reached the place where we can recognize that interdisciplinarity enables disciplines (as Barnett has argued), or it may be because interdisciplinarity has itself mutated and now offers new possibilities.

Is the space for the production of knowledge free, then? It hardly seems free for work that does not fit easily into existing categories. It continues to be contested, and for all the same reasons it was always contested. And yet, the contributors to this special edition of *History of Intellectual Culture* work from the conviction that free space still exists. They find that free space in several ways. First, most of our authors approach interdisciplinarity from the ground up. They do not propose abstract schemata for understanding interdisciplinary research and teaching, but, rather, work from specific examples and experience to draw conclusions about the myriad forms of life that occur at borders. Second, several authors emphasize the political nature of interdisciplinary practice. Third, a number of authors point out the relationship between interdisciplinarity and globalization, a relationship that heightens the need for interdisciplinary practitioners to develop a critical perspective and an awareness of specific contexts. And fourth, a number of papers make the case that interdisciplinarity must learn from its past. Several of our authors situate current interdisciplinarity in the history of encounter and

struggle for legitimacy, suggesting ways to learn from and move beyond earlier preoccupations and emphasizing the value of interdisciplinary approaches in relation to the increasingly complex problems of a postmodern world.

Mieke Bal, in her recent *Travelling Concepts in the Humanities: A Rough Guide*, has this to say about interdisciplinarity:

Philosophy creates, analyses, and offers concepts. Analysis, in pursuing its goal – which is to articulate the 'best' (most effective, reliable, useful?) way to 'do,' perform, the pursuit of knowledge – puts them together with potential objects that we wish to get to know. Disciplines 'use' them, 'apply' and deploy them, in interaction with an object, in their pursuit of specialized knowledge. But, in the best of situations, this division of tasks does not imply a rigid division of people or groups of people along the lines of disciplines or departments. For such a division deprives all participants of the key to a genuine practice of *cultural analysis: a sensitivity to the provisional nature of concepts*. Without claiming to know it all, each participant learns to move about, travel, between these areas of activity.... This is the basis of interdisciplinary work.³

Bal, inspired by Deleuze and Guattari, argues that concepts travel, and in doing so, they mutate and propagate in different forms. There is almost an ecology of concepts here. Interdisciplinarity becomes more than a tool for knowledge production; it becomes a place we inhabit and a road we traverse. The papers that follow consider the ways in which the travel has been difficult, but also rewarding, and above all creative.

The impetus for these papers was Paradigms Lost and Paradigms Gained: Negotiating Interdisciplinarity in the Twenty-First Century, a symposium held at the University of Calgary in May of 2001. Held in part to mark the twentieth anniversary of the University of Calgary's Faculty of Communication and Culture (formerly the Faculty of General Studies), this event attracted well over a hundred participants from across North America, as well as from Europe. Such a gathering seemed appropriate not only because, from its inception, this faculty has focused on interdisciplinary teaching and research, but also because the past twenty years or so has been a period of enormous change with regard to the discovery, organization, and dissemination of knowledge, in the university and beyond. The sheer amount of information available has become almost overwhelming, to say nothing of the degree to which many traditional approaches and claims to knowledge have been contested by a number of critical discourses. The postmodern university is certainly feeling the effects of these and other pressures, and interdisciplinarity, however defined, has been and continues to be an important part of these dynamics. Consequently, providing an opportunity to reflect on the evolution of approaches to interdisciplinary research and teaching over the past two decades or so seemed an important project, and it is one that continues through the publication of this special issue.

As co-chairs of the committee that organized *Paradigms Lost and Paradigms Gained*, we called it a "symposium" rather than a "conference," hoping that this would signal our desire to facilitate a genuine exchange of views. We even hoped that those who participated in the event might feel that they had become part of a special community of people who, for a variety of reasons, shared a passion for interdisciplinarity. This is indeed what happened, as participants gathered formally and informally to engage in lively conversations about the evolution of interdisciplinary theory and practice and about current issues and emerging developments related to interdisciplinary research and scholarship. While it is impossible to recreate the sense of momentum and the feeling of emerging community that characterized these interactions, we believe that the papers presented here reflect the spirit of collective engagement that infused the symposium and offer readers a chance to enter into the many conversations about interdisciplinarity that took place at the Paradigms symposium.

Because interdisciplinarity has developed over a long period in a number of different contexts, it is very much a "contested category," a term that means different things to different people, and while this is apparent in our collection of selected conference papers, as mentioned above, the articles do overlap in ways that highlight the value of their juxtaposition here. Together, they constitute an important exploration of fundamental questions, but from new perspectives. What is interdisciplinary knowledge? What is the relationship between disciplinarity and interdisciplinarity? How does one communicate across disciplinary boundaries? What problems are posed by interdisciplinary teaching? By interdisciplinary research? What should be the goals of interdisciplinary courses and programs? What theoretical frameworks and methodological tools are appropriate to interdisciplinary projects? How do particular institutional arrangements and processes affect interdisciplinary practice? How does one measure the success of an interdisciplinary project? These are some of the questions that provide points of departure for the articles collected here, and while readers will not find simple or definitive answers to any of these questions in this collection, they will likely gain insight into the role that such questions play in opening up spaces that allow new vantage points for seeing issues afresh.

Jill Vickers, the first of three keynote speakers, began the Paradigms symposium by reflecting on past successes and failures of interdisciplinarity and on contemporary challenges to those engaged in interdisciplinary research and teaching; thus, it is appropriate that this special issue begin with her article, "Diversity, Globalization, and 'Growing up Digital': Navigating Interdisciplinarity in the Twenty-first Century," which, in describing the postmodern landscape, provides a context for reading the papers that follow. Vickers identifies three main challenges that interdisciplinary practitioners in the humanities and social sciences currently face — those posed by diversity, by globalization, and by the digital revolution — and she argues that we can better understand these challenges by shifting our analyses of interdisciplinarity from the macro issues that have so long preoccupied interdisciplinary practitioners, to very specific projects. Putting her advice into practice, she discusses the evolution of ethnic studies and women's studies, highlighting the need to appreciate the historical contexts from which they have emerged and in which they have evolved, and the importance of developing criteria for evaluating the success of interdisciplinary projects.

Like Jill Vickers, Liora Salter (also a keynote speaker at the Paradigms symposium), in "Science and Public Discourse" situates her discussion within an historical frame that allows her to revisit the now considerable literature on interdisciplinarity with a view to teasing out new questions and to speculating on the successes and failures of particular projects. And also like Vickers, she highlights the importance of conducting this exercise within very specific

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contexts, which she does by focusing on the interdisciplinary challenge of facilitating communication among different types of scientists and between scientists and the general public. Arguing that this complex project has not been particularly successful, she analyzes the problematic inter-group dynamics generated by differing models of communication and suggests the magnitude of the challenge inherent in removing some of the barriers between scientific and public discourses.

If both Vickers and Salter offer readers a cautionary tale, so too does Alison Hearn (also a keynote speaker at the Paradigms symposium) in her article, "Interdisciplinarity / Extradisciplinarity: On the University and the Active Pursuit of Community." Hearn argues that at the heart of the university is a profound tension: on the one hand, the university exists to serve the society that created it; on the other, it can only truly do so by being a space that is free from external control. Showing how this paradox has become apparent in a variety of contexts throughout the history of the institution, she explains how current discussions of interdisciplinarity reflect this tension; then she draws our attention to the ways in which discourses of interdisciplinarity can serve the interests of the corporate university, and in so doing undermine the very kinds of critical interdisciplinarity that many of us would champion. While the picture Hearn paints is in many ways a bleak one, she offers cautious hope through the vision of university community she presents.

Like Hearn, Schneider and Caswell focus on the importance of community in the university setting and on the crucial relationship between community and the creation of interdisciplinary knowledge. Offering an analysis that is at once theoretical and practical, in "Using Narrative to Build Community and Create Knowledge in the Interdisciplinary Classroom," they describe the use of a narrative approach in teaching an interdisciplinary course in acoustics for students from both engineering and music. Drawing on Walter Fisher's ideas about the centrality of narrative to human communication, this narrative approach to interdisciplinary teaching creates a genuinely participative classroom. Schneider and Caswell offer important insights into how interdisciplinary approaches to teaching can enable conversations across a number of boundaries in the interests of what they see as the closely related projects of creating knowledge and fostering intellectual community.

Like most of the contributors to this special issue, Lisa Lattuca is interested in examining very specific phenomena with a view to seeing interdisciplinarity in new ways. In "Creating Interdisciplinarity: Grounded Definitions from College and University Faculty," she turns her attention to the practitioners of interdisciplinarity themselves in search of a definition of interdisciplinarity that is grounded in lived experience. Part of a larger study, her analysis draws on interviews with faculty members at four American colleges and universities, all of whom see themselves as being involved in interdisciplinary teaching and/or research. Putting their descriptions of what they do at the centre of her analysis, Lattuca offers a challenge to those who see integration of disciplinary perspectives as the defining feature of interdisciplinarity and suggests that a definition encompassing a wider range of activities would likely be more accurate and more helpful. Further, she finds the key to such a definition in the questions at the heart of interdisciplinary projects.

Rodgers, Booth, and Eveline, like Lattuca, are interested in asking questions that enable a revisioning of interdisciplinarity and, in particular, that clarify inter/disciplinary politics. Like

Hearn, they portray the contemporary university as existing at an important crossroads, one that they see as a site of struggle between hegemonic (disciplinary) forces that are not only unable to respond adequately to today's complex problems but also in some ways contribute to them, and marginal (interdisciplinary) forces, whose permeable boundaries and encompassing visions make them particularly well-suited to respond to complex problems, while at the same time undermining their ability to generate political clout. Thus the key question for them is how interdisciplinarians can best play the political game that this situation demands. Is the answer to be found in adopting some of the advantaging practices of disciplines? Should interdisciplinarians map and regulate with greater precision the territories they occupy and patrol their borders with greater care? In attempting to answer these questions, the authors offer insights with both theoretical and practical implications.

Jennifer Sumner also highlights the political implications of interdisciplinarity in "Relations of Suspicion: Critical Theory and Interdisciplinary Research." Using as her point of departure the notion that all knowledge (particularly in the social sciences and humanities) is embedded in a political context, she argues that how one conceptualizes one's research (and one's teaching) is a political act. Sumner urges interdisciplinarians to adopt critical theory, infusing their approach to research with a critical attitude, not only toward disciplinary boundaries, but also toward the social and cultural institutions that they study, thereby illuminating the relational dynamics that sustain them and clarifying whose interests are being served by particular discourses. Like Rodgers, Booth and Eveline, Sumner stresses the value of interdisciplinary practice as a means of responding to complex challenges such as sustainability and globalization, a value that she argues is greatly enhanced when interdisciplinarians cultivate a critical attitude that makes them suspicious of power.

The final two articles illustrate in very concrete and fascinating ways how interdisciplinarity can facilitate a rich response to the challenges posed by complex problems, and like the article by Schneider and Caswell, they suggest the generative and transformative possibilities inherent in a particular kind of border crossing: travel between the humanities and the physical sciences. In "The Therapeutic Psychopoetics of Cancer Metaphors: Challenges of Interdisciplinarity," Ulrich Teucher brings together his two seemingly disparate areas of expertise - in literature and in medicine - in a discussion of the therapeutic power of narrative to help cancer patients deal with their illness. He focuses in particular on specific metaphors that often function as framing tropes for differing versions of the story of what it means to have cancer. Noting that not all patients are helped by the same story (e.g., cancer as an enemy with whom one does battle), Teucher analyzes a range of metaphors within cancer discourse with a view to developing a "psychopoetics" that can improve the treatment of cancer patients, while underscoring the power of interdisciplinary research to create new knowledge. Similarly, in "Growing an Interdisciplinary Hybrid: The Case of Acoustic Ecology," Marcia Epstein traces the emergence of acoustic ecology - the study of the effects of sound on biological and cognitive processes, on social and cultural dynamics, on the physical environment. Epstein argues that this new "hybrid field" (so named because it has no clear disciplinary home but draws on a number of fields, ranging across the academic spectrum) not only illuminates the relationships among seemingly disparate bodies of knowledge but also offers a number of ways to identify complex problems and to construct informed solutions to them.

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Each of the articles in this special issue provides a stimulating reflection on a significant dimension of interdisciplinary theory and practice. Together, they move the discussion of interdisciplinarity well beyond a preoccupation with definition and justification. They also highlight the importance of asking questions that can only be answered by traveling across disciplinary boundaries and the value of the multi-dimensional knowledge gained from such journeys in a world that is increasingly complex and interconnected.

Notes

1. John Ralston Saul, "University," in *The Doubter's Companion: A Dictionary of Aggressive Common Sense* (Toronto: Penguin, 1994), 301.

2. Ronald Barnett, *The Limits of Competence: Knowledge, Higher Education, and Society* (Buckingham UK: The Society for Research into Higher Education and Open University Press, 1994), 126.

3. Mieke Bal, *Travelling Concepts in the Humanities: A Rough Guide* (Toronto: University of Toronto Press, 2002), 55.