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35th AIS Conference 'Comes Home' to Miami

The Association for Interdisciplinary Studies will come home to Miami University for its 35th annual AIS Conference scheduled for November 7-10, 2013, in Oxford, Ohio.

Miami University's Western Program is hosting the conference, in partnership with the Bachelor of Integrative Studies Program, the Honors Program, and other interdisciplinary programs at Miami University.

Attendees will gather amid the beauty of the historic Oxford campus, with conference sessions and accommodations at the Marcum Hotel & Conference Center, which is situated adjacent to the university's Formal Gardens.

Special events will be at Peabody Hall on the Western Campus. Built in 1871, Peabody Hall was the home of the former innovative Western College Program/School of Interdisciplinary

Keynote Speakers



Carolyn Haynes



Carl Zimmer

Studies (1974-2008) and is now the hub for the Western Program, which engages students in interdisciplinary thinking and supports a foundation of individualized and integrated study drawing from the humanities, sciences, arts, social sciences, and professional programs. Peabody Hall has served as the

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Essays in 'Valences' Wrestle with Question of Interdisciplinarity

By Keith E. Welsh
Professor of Religious Studies
Webster University, St. Louis, Missouri

Valences of Interdisciplinarity, edited by Raphael Foshay of Athabasca University (2012), offers 16 essays which emerged from "The Scope of Interdisciplinarity," a symposium held at Athabasca University, Alberta, Canada, in 2008. The intent of the symposium was to bring together a group of "leading scholars of interdisciplinary work in order to explore the range of ways that interdisciplinarity finds expression in thinking, research, and teaching, and to measure its valences" (p. 1). The majority of the papers are highly theoretical and abstruse: challenging reading, especially for the uninitiated.

Foshay frames the collection with an introduction exploring the theories of the modern university from Kant

to Jameson as a means of situating the debate about "Interdisciplinarity, What For?" that is worked out in the succeeding essays. It is worth noting at the outset that the atom of interdisciplinarity

has many different valences here. The chemical image of electrons jumping from shell to shell in their orbit around the nucleus figures forth the nature of the essays in the collection.

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A REVIEW

Valences of Interdisciplinarity: Theory, Practice, Pedagogy. Raphael Foshay (Ed.) Alberta, Canada: AU Press. 2012. Paperback (ISBN 978-1-926836-46-1. \$34.95; E-book (978-1-926836-47-8, pdf, 978-1-926836-48-5, epub.).

Review: Foshay's *Valences*

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They touch on a range of very specific perspectives from which it is sometimes difficult to intuit the nature of the interdisciplinary nucleus. Its atomic number varies, so to speak.

For the psychologist, “valence” is an “emotional force or significance, spec. the feeling of attraction or repulsion with which an individual invests an object or event” (*Oxford English Dictionary*). Here, likewise notions of attraction to and fear of interdisciplinarity seem apt. As in the uncertainty—and perhaps instability—of the nucleus of an atom, so, too, the powerful attraction of untamed interdisciplinarity balanced by the academic insistence that the term be defined, delineated, mastered.

The collection demonstrates that exploring “interdisciplinarity” is a fraught enterprise. On the one hand, it is a generic term that subsumes a wide range of species in its taxonomy: “multidisciplinary,” “transdisciplinary,” and “integrative” being the best known and most frequently used in this book. On the other hand, “interdisciplinarity” itself is also a species competing for comprehensibility within and without the taxonomy of the academy. It competes with its progenitors and its offspring, and, by its very nature, might contain its own extinction. Given these complexities, this review can give only a snapshot of each contribution.

Part I: Theory

The seven essays that comprise Part I are nicely framed by Martin Jay’s “The Menace of Consilience: Keeping the Disciplines Unreconciled” and Rick Szostak’s “Integrating Interdisciplinary Studies Across the Humanities and Social Sciences.” Jay

addresses an underlying threat to interdisciplinarity: the disappearance of the disciplines into one grand theory of knowledge. While he acknowledges that disciplines are imperfect historical constructs, both moving targets and entrenched denizens of the academy, he observes that we will not soon be rid of them, nor should we want to be. An absence of disciplines can lead to intellectual incoherence or to a kind of theory of all things, that is, consilience, either of which will silence the discussion that propels the human project of living and learning. Both deny the vital role that interdisciplinarity plays in that discussion.

Szostak’s argument complements Jay’s. Szostak stresses the importance of history as “the field that spans the humanities and social sciences” (p. 165). On this common ground, then, the apparent differences between the humanities and the social sciences can be resolved. He acknowledges that there are extremes to both domains, but that both domains share much in common and can find a common language both to appreciate their shared legacy and as a mode in which interdisciplinary work can occur: “interdisciplinarians should be guided to integrate” the two domains, and should provide the disciplines with “an appreciation of a cumulative . . . scholarship that links all areas of the academy (and beyond)” (p. 185).

Ian Angus argues for interdisciplinarity as a foundation for the good life in “The Telos of the Good Life: Reflections on Interdisciplinarity and Models of Knowledge.” Angus focuses on the position of the individual within the disciplinary structure of the modern university as addressed by both Jay and Szostak. Angus comments on the commonly felt resistance to interdisciplinary study within an institution driven by disciplines.

At the same time, he reminds us that interdisciplinarity is part of the personal: “Self-reflection in the construction of a good way of life is the telos of interdisciplinary studies” (p. 64). He sees this as the primary goal of interdisciplinary education: The teacher succeeds by providing an example of “a learner grappling with living the good life” (p. 68).

“Interdisciplinary Ensembles and Dialectical Integration: A Proposed Model of Integrated Interdisciplinarity” by Wendell Kisner explores how to bridge the apparent gulf between “Integrative” and “Interdisciplinary.” Union evolves from the very tension that holds the two concepts in relationship to one another. His working example is Gregory Schufreider’s analysis of Piet Mondrian’s paintings, which Schufreider describes as both universal and particular, a unity brought out of heterogeneity. So, too, the interdisciplinary scholar works with the disparate approaches of various disciplines to integrate them into an interpretive whole.

Diana Brydon pursues a wicked problems approach, anticipating two of the essays in Part II. “Globalization and Higher Education: Working Toward Cognitive Justice” undertakes to intervene “in current knowledge politics debates to advocate goal-oriented forms of interdisciplinarity structured around contextualized problem solving” (p. 98). Drawing on feminist and post-colonial theories, Brydon argues “that interdisciplinarity, internationalization, globalization, and cognitive justice need to be thought of—and addressed—together” (p. 98). This she sees as a key challenge to the work of higher education in the global North.

In “The Law of Non-contradiction: Dialectic and the Possibility of Non-propositional Knowledge” Raphael

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2013 AIS Conference

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base for AIS since its founding at a conference in 1979.

“Integrating Arts and Sciences” is the theme for the 35th annual conference, which will serve as a forum for a wide-ranging dialogue concerning the development of new approaches to teaching and research to meet the complex needs of students, employers, and other stakeholders in today’s society.

Nicholas Money, director of the Western Program, is the conference coordinator.

“We are working at a time when higher education is placing ever greater premium upon integrative and interdisciplinary approaches to learning and problem solving,” he said. “This shift in the academy is driven by multiple factors, including the professional demands of the 21st century marketplace. Major employers are looking for graduates with strengths in critical and creative thinking, broad cultural and scientific literacy, and a commitment to teamwork.

“These skills have proven difficult to obtain sometimes through traditional disciplines. Interdisciplinary studies hold great promise for enhancing the modern curriculum, but require imaginative strategies to enhance communication and collaboration among educators in the natural sciences, social sciences, and the arts.”

The keynote speakers will be Carl Zimmer, Science Writer for *The New York Times*, and Carolyn Haynes, Interim Associate Provost for Undergraduate Studies and Professor of English at Miami University.

Zimmer is author of *Evolution: Making Sense of Life* (with co-author Douglas Emlen), *Science Ink: Tattoos of the Science Obsessed*, *The Soul Made Flesh: The Discovery of the Brain and*



The Western Program, host of the 2013 AIS Conference, is based in historic Peabody Hall on Miami University’s Western Campus in Oxford, Ohio.

How It Changed the World, and *Parasite Rex: Inside the Bizarre World of Nature’s Most Dangerous Creatures*, among others. He is a lecturer at Yale University where he teaches writing about science and environment. He will be the plenary speaker on Friday, November 8.

Haynes was previously director of Miami’s University Honors Program, which advances an outcomes-based and individualized liberal education plan. As the Honors Program Director, she worked to expand the overall size and diversity of the students and faculty involved in the program. She is the editor of *Innovations in Interdisciplinary Teaching*, and she has written more than 25 articles on student learning, pedagogy and curricular issues, focusing primarily on interdisciplinary approaches to education. She is a past president of AIS, and she currently serves on the Publications Board of the National Collegiate Honors Council and as a consultant-evaluator for the Higher Learning Commission. She will be the plenary speaker on Saturday, November 9, when she will discuss the challenges and joys of interdisciplinary education.

As part of the conference, attendees can sign up for the Freedom Summer Campus Tours, led by Jacqueline Johnson, archivist of the Western College Memorial Archives. In 1964, more than 800 volunteers gathered on the former

Western College for Women campus to prepare to conduct voter registration drives among African-Americans living in the South. Three of these students, James Chaney, Michael Schwerner, and Andrew Goodman, were later murdered in Mississippi. Johnson is the author of *Finding Freedom: Memorializing the Voices of Freedom Summer* and is the chairperson for the national Mississippi Freedom Summer Conference, which will be in Oxford in 2014.

Other special events include a Thursday evening reception at the Miami University Art Museum with the viewing of three exhibits: *Early Modern Prints*, William McGee: Abstract Expressionist, and *A Museum Collects*, and the 35th anniversary celebration of the Association for Interdisciplinary Studies at Peabody Hall on Saturday evening.

There will be a pre-conference Nuts and Bolts Workshop, with Pauline Gagnon and Allen Repko, hosted by the Bachelor of Integrative Studies Program, in Marcum Conference Center on Miami’s Oxford Campus.

The planning committee includes Kim Ernsting, Audree Riddle, Louise Davis, and Nicholas Money.

The early registration deadline is October 1. More information can be found on the conference website: <http://www.miamioh.edu/aisconference2013> ■

'Community of Practitioners' Plays Key Role in IDS

By Baburhan Uzum
and Betsy Ferrer
James Madison College
Michigan State University

Introduction

For the past two years, we have had the opportunity to participate in the Interdisciplinary Inquiry and Teaching (IIT) Fellowship through James Madison College at Michigan State University. This fellowship is designed for graduate students who engage in interdisciplinary work in their scholarship and teaching. A core strategy of the program is to create a "community of practitioners" that encourages and sustains conversation between students and with faculty members in order to investigate the nature of interdisciplinarity and to use this understanding to inform our teaching and scholarship. In addition to our weekly scheduled conversations, fellows engage in classroom observations at James Madison College. We design and implement our own Intellectual Application Project (IAP), which allows us to apply what we have learned. The IAPs are individual or collaborative research projects focused on interdisciplinary teaching, and we present our findings in a public forum. These projects could involve the construction of an interdisciplinary syllabus, an analysis of our teaching, or the development and instruction of an interdisciplinary course for undergraduate students at James Madison.

In reflecting on our experience, we have found Lave and Wenger's notion of "legitimate peripheral participation" to be a useful framework for analyzing how we progressed toward becoming interdisciplinary scholars and teachers. According to Lave and

EMERGING SCHOLARS FORUM

EDITOR'S INTRODUCTION: This installment of the Emerging Scholars Forum column comes in the form of a testimonial from two students participating in the Interdisciplinary Inquiry and Teaching Fellowship at James Madison College. Michigan State University will be hosting our conference next year, so this is timely insight into its program. Their account demonstrates the importance of an educational environment for interdisciplinary studies. Interdisciplinarity's integrative approach emphasizes interconnections between theory and practice, teaching and learning, collaboration and individual achievement. Crucial to these connections are effective mechanisms for dialogue, interaction and feedback. The fellowship described here offers examples of how to enhance the holistic experience of interdisciplinarity through communities of learning. Betsy Ferrer is a fourth year PhD student in Curriculum, Teaching, and Educational Policy at Michigan State University. Her previous degrees are in Anthropology and Sociology (B.A., University of Notre Dame), Social Science (M.A., University of Chicago), Education (M.Ed., University of Notre Dame), and Educational Administration (M.A., University of Notre Dame). Betsy taught middle and high school English for eight years and has taught undergraduate and graduate courses in English methods and supervised intern teachers at MSU. Betsy's research focuses on how youth in Western Kenya use art to pursue economic, social, and political legitimacy. Baburhan Uzum received his BA and MA degrees in English Language Teaching from Middle East Technical University in Turkey. He is currently a doctoral student in Second Language Studies at Michigan State University. Baburhan's research interests include second language acquisition, language socialization, discourse analysis, sociocultural theories on learning, second language teacher education and interdisciplinary approaches to learning and teaching. He has taught several semesters in the Intensive English Program at MSU's English Language Center, and coauthored many projects on second language acquisition and teacher education. His current research is on foreign language teachers' socialization into the American educational context.

—JW

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Wenger (1991), this is a process by which "learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (p. 29). As fellows, we joined a community of practitioners of interdisciplinary teaching and learning, composed of James Madison faculty, as well as graduate students from other departments across the

university who were engaged in interdisciplinary work. Because of this participatory atmosphere, we grew to more deeply understand the nature of interdisciplinarity and to put that knowledge into practice through our course design and implementation.

According to Lave and Wenger (1991), "the development of identity is central to the careers of newcomers in communities of practice, and thus fundamental to the concept of legitimate peripheral

participation” (p. 115). In our case, our community of practice included four core faculty members from James Madison College and six graduate students from different departments across Michigan State University, including anthropology, education, second language studies, and political science. Through weekly conversations we built relationships and recognized new possibilities for interdisciplinary teaching and learning. Our conversations were anchored by readings including Julie Thomson Klein’s (1996) *Crossing Boundaries* and Lisa Lattuca’s (2004) article, “Does Interdisciplinarity Promote Learning?” These readings helped us map the terrain of interdisciplinary teaching and learning, and because we came from different disciplinary departments, we each brought new perspectives to these ideas and had to clarify terms we took for granted in our own departments in order to talk across disciplines. The faculty members scaffolded our understanding of interdisciplinarity by guiding us to question our assumptions and challenging us to articulate our unfolding definitions and conceptualizations of interdisciplinarity in theory and practice.

The Madison faculty further scaffolded our understanding of interdisciplinarity by inviting us to observe undergraduate courses at James Madison College. James Madison is a unique space within Michigan State University, a residential, multidisciplinary college, offering four majors, including International Relations, Social Relations and Policy, Comparative Cultures and Politics, and Political Theory and Constitutional Democracy. By observing these courses, we were able to see the concepts of interdisciplinarity we had discussed in practice in the classroom and then debrief what we observed with our community.

This helped us to understand “how masters talk, walk, work, and generally conduct their lives; how people who are not part of the community of practice interact with it; what other learners are doing; and what learners need to learn to become full practitioners” (Lave & Wenger, 1991, p. 95). This enabled us to ground our conversations in interdisciplinarity practice. Analyzing classroom interactions and teaching practice allowed us to refine our understanding of interdisciplinarity by providing us with examples and non-examples of interdisciplinary teaching. By observing others engaged in this practice, we developed a deeper understanding of ways to become more interdisciplinary in our teaching.

As Lave and Wenger describe, “an extended period of legitimate peripherality provides learners with opportunities to make the culture of practice theirs” (p. 95). In the spring semester, we proposed our own Intellectual Application Projects (IAPs). As the final step in our development as interdisciplinary teachers and scholars, these projects enabled us to attempt to enact interdisciplinary teaching with the support of core faculty as we designed and taught our own reading group on the topic of language and performance. In addition, we were able to apply an interdisciplinary perspective to our own course design in our home departments through collaborative syllabus construction. The syllabus construction was truly a collaborative endeavor as fellows and faculty members brought their considerable disciplinary and interdisciplinary perspectives to bear on each syllabus. This work made our learning visible as each subsequent draft moved closer to an interdisciplinary course, rather than merely a collection of readings from different disciplines.

Each contribution (whether it be a suggested reading, a type of pedagogy, or an assignment) was evaluated based on its relation to the whole, always keeping in mind the broader goals of the course and the essential questions through which the students would gain an interdisciplinary understanding.

Conclusion

Opportunities such as the Interdisciplinary Inquiry and Teaching Fellowship allow graduate students to broaden their perspectives on teaching, learning, and research and allow faculty to mentor young graduate students into the profession. Prior to our participation in the IIT Program, we had had opportunities to talk about teaching and learning in our home departments. However, these conversations tended to focus on organizational aspects of teaching. The conversations and interactions we had through IIT allowed us to bring new disciplinary perspectives to bear on our teaching and to systematically investigate the nature of interdisciplinary practice. We both plan to seek jobs in interdisciplinary spaces and participating in this community of practice has helped hone our skills, socialized us as nascent scholars, and supported our own work that reaches across disciplinary boundaries.

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Review: Foshay's *Valences*

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Foshay explores the problems for interdisciplinarity posed by the Law of Non-contradiction (LNC), which he contends inheres in the foundation of the disciplines. Because interdisciplinarity can be intuitively contradictory, it needs to reject LNC in favor of “an intelligible unintelligibility” (p. 134).

Julie Thompson Klein surveys the debate over the definitions of “interdisciplinary,” which have shifted, evolved, and collapsed upon themselves over time. In “Interdisciplinarity, Humanities, and the Terministic Screens of Definition” she employs a rhetorical approach to analyzing the protean usages of the word and its related terms. To put it simply, the use of the term has been shaped by personal and institutional stakeholders, and to understand this we need to understand how the terministic screens of nomenclature “continues to create, legitimate, maintain, challenge, and reformulate meaning and practice” (p. 160).

Part II: Practice

Part II is devoted to five essays: Lorraine Code’s “Ecological Thinking as Interdisciplinary Practice: Situation, Silence, and Skepticism”; Jan Jagodzinski’s (sic) “Michael Haneke: The Spectatorship of Self-Reflexivity [sic] and the Virtual Gaze in *Benny’s Video* and *Caché*”; Gary Genesko’s “Transdisciplinarity and Journal Publishing”; Morny Joy’s “Gender, Women’s Rights, and Religion: An Interdisciplinary Case Study”; and Harvey Graff’s “Literacy Studies and Interdisciplinary Studies: Reflections on History and Theory.”

The essays by Lorraine Code and Morny Joy are of the school of wicked problems and echo many of the concerns of Brydon’s essay in

Part I. Drawing on Rachel Carson’s *Silent Spring*, Code develops the concept of “ecological thinking” which draws upon “knowing the detail of place, population, and particularity” (p. 191) and therefore requires multiple ways of collecting information, interpreting it, and then acting upon it. She offers a case study of drug distribution in Tanzania. Originally drugs were dispensed to rural Tanzania by a centralized authority. Every region received the same drugs, irrespective of the needs peculiar to that region. Through intensive on-the-ground research—of place, population, and particularity—a system developed that delivered drugs by a demography of need.

Joy draws upon the natural interdisciplinarity of Religious Studies to explore two cases involving women’s rights: the status of aboriginal women in Canada and the implementation of Shari’a law in Ontario. She observes that such studies can be fraught with conflict because the very understanding of women’s rights is contested from multiple perspectives. They can be seen both as a violation of traditional religious rights and a concept imposed by late colonial capitalism. Jay critiques the standard binaries of sacred/secular and public/private to reconfigure the understanding of the relationship between religion and human rights. “The language of rights itself has to move beyond the notion of irreducible individual entitlement to one . . . [appreciative] of communal diversity and yet . . . founded on a solidarity . . . that goes beyond a perfunctory theoretical nod in the direction of difference” (p. 268).

Jan Jagodzinski’s essay provides an example of a film-studies approach to interdisciplinarity. In analyzing two films by Michael Haneke, Jagodzinski employs a number of disciplinary frameworks—particularly Lacan’s concept of

the gaze—as tools to interpret Haneke’s work. “Self-Reflexivity” is the term Jagodzinski coins to name the way that Haneke shifts the viewer into the position of disconnected witness rather than engaged spectator. Haneke forces the viewer to confront these films in a way that rejects typical Hollywood motion picture: “self-reflexivity . . . changes the question of desire from what cinographic pictures ‘want,’ a question of desire as ‘lack,’ to what they can ‘do,’ a reorientation . . . of desire to unhinging spectatorship within a society of the synopticon” (p. 214).

In “Transdisciplinarity and Journal Publishing” Gary Genesko considers the histories of the journals *Communication*, *Recherches*, and *Telos* as “sites in and around which the rituals of a microinstitution are enacted” (p. 232). Genesko traces the vicissitudes of publication history, following the tracks of the shifting editorial groups almost as though the journals are organisms whose life-cycles he is documenting. He concludes “that transdisciplinarity has a tendency to work itself out betwixt and between journal publishing on the margins of academe” (p. 247).

Harvey Graff’s essay traces the social histories of literacy studies and their interconnection with interdisciplinary studies. Graff concludes “Interdisciplinary developments follow different paths toward a variety of institutional, intellectual, and societal ends, different timelines and lifetimes” (p. 295). Such paths need not lead toward the stability represented by the disciplines, and perhaps that is their strength.

Part III: Pedagogy

The volume concludes with four essays discussing different sorts of interdisciplinary pedagogies, from nuts and bolts essays by Suzanne de Castell (“One Code to

Rule Them All . . .”) and Roxanna Ng (Decolonizing Teaching and Learning Through Embodied Learning: Toward an Integrated Approach”) to a highly theoretical essay by Paul Nonnekes (“Teaching and Enjoyment: A Lacanian Encounter with the Master Signifier”) and Derek Briton (“From Integrated to Interstitial Studies”).

Suzanne de Castell focuses on developing digital games to create teaching materials as a means of interdisciplinary collaboration. This requires what she terms “ludic epistemology . . . concerned with . . . knowledge representation in the development of computer-supported game-based learning environments” (p. 328). Her discussion focuses on a game which teaches about Baroque music, developed collaboratively with the chamber music group, Tafelmusik (among others). The second half of her essay is devoted to describing a Multimodal Analysis Program (MAP). MAP serves to render qualitative research more objective by creating video recordings of human behavior that can be analyzed on multiple levels at once rather than relying on a text-based annotation system. The chapter provides full-color illustrations that make this clearer than I can here in this text-driven format.

Roxana Ng’s pedagogy, “Embodied Learning,” works to integrate “the mind, body, emotion, and spirit in the construction and pursuit of knowledge” (p. 343). Her approach is to “disrupt” the dichotomy between mind and body by use of traditional Chinese medicinal practices, especially the practice known as “Qi Gong”: the art of cultivating the breath. Using this practice in conjunction with insights gleaned from Gramsci, Fanon, and Foucault, she has developed a course “Embodied Learning and Qi Gong.” Students are introduced to the Chinese

practices in conjunction with readings dealing with the body from Western disciplines of sociology, anthropology, and psychotherapy. Students practice Qi Gong as part of their course work and record those experiences so as “to treat the body as a site for knowledge construction” (p. 355). The overall intent is to use Chinese practices as a way of interrogating and critiquing Western forms of knowledge that tend to subvert the body in favor of the mind.

Julie Thompson Klein surveys the debate over the definitions of “interdisciplinary,” which have shifted, evolved, and collapsed upon themselves over time.

Paul Nonnekes’ essay, “Teaching and Enjoyment” draws heavily on Lacan. He postulates two kinds of students: those who find no pleasure in reading theory and those who draw enjoyment from the complex challenges that such reading poses. In Nonnekes’ dichotomy, the first class of students is in search of pleasure—quick summaries that they can easily digest and feel comfortable about. The smaller second set derives enjoyment (as opposed to pleasure) in confronting a difficult task. Here the enjoyment arises from personal mastery through persistent struggle. Using Lacan’s system of sign and signifier, Nonnekes demonstrates how this pedagogy can move the student from the position of passive recipient to active pursuer of knowledge.

Derek Briton’s use of the term “interstitial” in “From Integrated to

Interstitial Studies” concludes the volume by tracing the development of Athabasca University’s MA in Integrated Studies. Drawing on the work of Heinz Inzu Fendl and Jacques Lacan, Briton critiques the program’s achievements and concludes that “an integrated model of interdisciplinarity . . . is not up to the task of creating new interpretive frameworks and new objects of knowledge without abandoning meaning and the possibility of truth,” echoing the argument his colleague Ian Angus put forward early in the volume (p. 385). Arguably the introduction of the term “interstitial” offers us another of the terministic screens Klein analyzes and suggests that the concept of “interdisciplinarity” will never stabilize, and, from the point of view of many in this volume, will be all the better for that.

What all the essays here seem to be wrestling with—at their core—is the creation of an engaged self, both for the practitioner of IDS and for students. Within the scope of IDS such a self is always interrogated and yet always cohesive, unstable but knowable, always becoming and yet also present. In wrestling with the shifting valences of interdisciplinarity, the authors reveal their own quests for integration, to find a stable nucleus within the cloud of shifting electrons: what Ian Angus calls the telos of interdisciplinarity. It may be that IDS violates both modernity through its ability to unsettle the usual structures of knowledge and postmodernity through its ability to insist on integration, however provisional. There is some angst in this, and it is reflected in the prose that is at times impenetrable in its layering of nuances and qualifiers. The end results do not always clearly answer this question, but surely all the contributors to this volume are asking “how is it that we should live?” ■

New Book Offers ‘Canon of Transdisciplinary Methods’

By Marcus N. Tanner, PhD
Integrative Studies Program Director
Texas Tech University

Introduction

In *Methods for Transdisciplinary Research* Bergmann, Jahn, Knobloch, Krohn, Pohl, Schramm (2013) provide understandable and rigorous methods for transdisciplinary research (TDR) by evaluating the integration instruments and methods utilized in 11 TDR research projects. According to the authors, “transdisciplinary research explores and finds solutions for societal problems, by making these problems, and the societal actors involved, a central reference point of research and by further developing the scientific research tools it has employed” (p. 14). This book provides a catalog of evaluated integrative instruments, tools, and strategies. This book adds significantly to the literature on transdisciplinarity at a time when the discussion is fledgling and the process of TDR is still being developed. Wickson, Carew, and Russell (2006) suggested that the consensus for “what transdisciplinarity is or how its quality can be evaluated” (p. 1046) is unclear. However, the authors of *Methods for Transdisciplinary Research* provide a compelling evaluation of TDR methods that both interdisciplinarians and transdisciplinarians will find useful.

Much of interdisciplinarity (IDS) is inherent in transdisciplinarity (TDS) so a juxtaposition of the two terms is important to bring out distinctions between them. But given the novelty of TDS to many interdisciplinarians it may be useful to situate the discussion of methods first in the relationship between IDS and TDS. Interdisciplinary studies has been defined as

a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with adequately by a single discipline or profession...IDS draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective. (Klein & Newell, 1977, pp. 393-394)

A REVIEW

Methods for Transdisciplinary Research: A Primer for Practice, Matthias Bergmann, Thomas Jahn, Tobias Knobloch, Wolfgang Krohn, Christian Pohl, and Engelbert Schramm. Frankfurt, Germany: Campus Verlag, 2013. 295 pp. Paperback (ISBN 978-3-593-39647-7). \$45.

Transdisciplinary studies has been defined as an integration of interdisciplinary academic researchers with non-academic participants (Tress, Tress, & Fry, 2005). An important distinction between IDS and TDS is that transdisciplinarity produces new knowledge by applying interdisciplinary integration methods to societal problems. Interdisciplinarians primarily focus on achieving a comprehensive understanding, whereas transdisciplinarians are concerned with bringing about effective real-world change. Newell suggests that IDS is more academic and theoretical where TDS is real-world and applied. The methods in this volume have been tested in terms of successful integration of knowledge in applying that knowledge to solve complex societal issues. IDS interest in the United States has focused on the former, using integration of knowledge as the litmus test for interdisciplinarity. If indeed, the litmus test for interdisciplinarity is integration of knowledge, the authors of the book have applied interdisciplinarity in ways that solve issues in society that are multipart and complex. The information in this book is a result of the completion of transdisciplinary research projects which not only informed solutions for “real-world” problems but evaluated the scientific concepts and methods of TDR (Bergmann et al., 2012).

Many universities, governments, and organizations around the world are engaging in transdisciplinary research with efforts at solving complex issues that plague our society. In 2012 Texas Tech University created a Transdisciplinary Research Academy. The Academy was designed to bring together researchers with diverse interests in an effort to explore questions of global impact and those that overlap with strategic research established by the University. The inaugural transdisciplinary academy will focus on nine different transdisciplinary projects. For example, researchers from Engineering and the Health Sciences Center are coming together to study bacterial communities in effective treatments for chronic wound infections. Researchers from Agricultural Sciences, Health Sciences Center, Human Sciences, and Mass Communications are studying the effective delivery and marketing of food and health products that inform consumer choice and provide for better health outcomes. Many of the transdisciplinary research projects at Texas Tech are working to advance knowledge in renewable energy, food safety, cancer, nutrition, climate and water, ecotoxicology, addiction recovery, STEM, and national security. The challenge for such teams is to overcome disciplinary boundaries. Interdisciplinary research teams, such as those at Texas Tech, who engage in interdisciplinary and transdisciplinary research could benefit from the methods of integration in the text under review.

Overview

The book is organized so that it can be read straight through or searched for information that may be useful in one's own interdisciplinary or transdisciplinary research project. Chapter One discusses the concept of transdisciplinary research, laying a foundation for the rest of the book. The authors construct a working definition of transdisciplinarity and in doing so present a process model of TDR developed by the Institute for Social-Ecological Research in Frankfurt, Germany. One facet of TDR that also applies to IDS is that "In the problem-solving process, transdisciplinary research crosses the boundaries separating disciplines and scientific fields, as well as those dividing scientific knowledge from practical knowledge, in order to work through the issues involved as needed" (p. 42). However, IDS tends to focus on understanding a complex problem, whereas TDR is focused on bringing together "understanding" with societal actors as an actionable solution to a problem. The text advocates for a combined approach to solving problems that goes beyond scientific hypothesizing and testing by including societal actors as part of the research team to arrive at pragmatic and implementable solutions.

The authors devote Chapters Two and Three to a discussion of integration instruments and methods. Chapter Two decontextualizes the descriptions of methods and strategies, allowing researchers to utilize an instrument or method as they see fit. Each instrument, tool, or method is described in generic terms so researchers could use these methods in other frameworks than those described in the book. Then, an approach is provided that breaks down how the instrument/method might be used. Each instrument/

method also includes suggestions for when to use it. Perhaps the best feature of this book is the models that are offered. Eleven research projects are presented as examples of transdisciplinary research in context. Chapter Three contextualizes the integration methods and strategies allowing the reader to see them in practice. Because of the organization of the book, the readers can search for integration methods and strategies

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that can be utilized in their own research project. The authors suggest Chapter Two as the most suitable for locating methods and instruments as they are collected according to their integrative function within a research process. Chapters Four and Five provide the reader with descriptions of publications that describe appropriate management practice for integrative research and finding suitable integration methods.

Integrative Methods for TDR

The authors attempt to provide a "canon of transdisciplinary methods" (p. 51) as an approach for filling in the gaps that exist in the inter- and trans- disciplinary literatures.

The integrative process offered in the text is a recursive model which utilizes optimization loops to fashion a theoretical strategy that can be adjusted as the research project moves forward. Thus, integration is accomplished through interdisciplinary conceptual work (A), theoretical framing (B) and hypothesis formulation (C). Chapter Two is structured in such a way that one can locate instruments/methods for integrating concepts and terms, theoretical strategy, and research questions.

Synthesizing concepts and terms in an interdisciplinary or transdisciplinary research project is a beginning but critical step: "Constant conceptual work regarding the core terms and concepts is an essential prerequisite for successful integration in transdisciplinary research" (p. 50). The authors go on to describe a number of integration methods for doing conceptual work, most of which are similar to the processes laid out by Repko (2012). As this step is crucial for both interdisciplinarity and transdisciplinarity, it is interesting that there are no citations of Association for Interdisciplinary Studies-affiliated authors. Theory strategy and development have always been problematic with interdisciplinary and transdisciplinary research. However, what I appreciate about this text is that researchers can easily locate strategies for integrating theory. For example, heuristics are used to cross-reference theoretical concepts from various scientific disciplines providing an interdisciplinary access to problems. This approach describes the real-world problem, conceptual heuristics are developed to analyze the research and ensure equal access to the problem, and they are then used "to pose the research question(s) scientifically." As another example of a theoretical strategy, the authors posit the

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Transdisciplinary Methods

(continued from page 9)

importance of a “shared framework which...accurately reflects the state of research in the area... is acceptable to all scientific and non-scientific participants in the research project” (p. 69). Double-sided critique is another theoretical framing strategy whereby TDR team members work to moderate epistemic divisions between natural and social sciences. This double-sided critique acts as a politician (as in Reagan, Gorbachev and the Berlin Wall) in tearing down the “methodological wall separating the two” sciences. Once this methodological wall is removed, an analysis of the relationship between society and nature can take place. The authors provide instruments/ methods for integration through research questions and hypotheses. Essentially, the goal in this section is to show how research questions can be jointly developed “in such a way that it is possible to carry out problem-oriented and integrated research that covers all aspects of a problem under study” (p. 74). The approach presented in the first three sections of Chapter Two is not unlike the interdisciplinary research process steps Repko (2012) provides for. However, the text offers more instruments/ methods beyond the conceptual, theoretical, and hypothesis framing. The authors discuss developing methods of integration, specifically the Zurich case study approach (TIPS), assessment procedures, the development and application of models, boundary objects, and research organization.

Chapter Three contextualizes the integrative instruments/methods by describing research projects where many of the instruments and methods were employed. For instance, a project on sustainable urban mobility takes the reader

through each phase and step of the project where the authors discuss each of the integrative instruments/ methods applied. Chapter Four is a discussion of management strategies for transdisciplinary research process and groups. The authors summarize recent literature on the topic; management strategies of an integrated project

What I found most useful about this book was its presentation of transdisciplinary research and methods of integration.

process, integration planning, problem description, research questions and research objectives; coordination, communication and learning processes; and quality management, criteria and products. Chapter Five provides an overview of the methods described in Chapter Two and some further assistance on how to choose an integration method that may be appropriate for one’s own transdisciplinary research project.

Conclusion

What I found most useful about this book was its presentation of transdisciplinary research and methods of integration. The examples were presented in such a way that even as a newcomer to the field, I felt I could participate in and perhaps even lead a transdisciplinary research project. The way in which the authors both decontextualized and contextualized the methods of TDR allowed me to see the methods for what they are and how I might use them in practice, but also how other researchers have utilized them. For those involved

in the Transdisciplinary Research Academy at Texas Tech, this text would be an essential asset to their work. Many of the examples provided in Chapter Three of this text are similar in scope to many of the TDR projects at Texas Tech. The researchers in this academy could utilize the steps, processes, instruments, and models for their own research. Interdisciplinary and those that teach at the graduate level would also find this text helpful. Not only does the text provide for a clearer understanding of transdisciplinary research, but it also expands the discourse on interdisciplinarity. Many of the methods and instruments in the text would not be foreign to those involved in interdisciplinary studies. It would be interesting to see how interdisciplinary researchers might utilize the instruments in this book as a way to expand the discourse of interdisciplinary research process outlined in Repko (2012).

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CONFERENCES

AGLS To Meet in Indianapolis

“At the Crossroads: General Education and Student Success” is the theme of the 53rd Annual Conference of the Association for General & Liberal Studies.

The conference is scheduled for September 19-21, 2013, in Indianapolis, Indiana. The deadline for proposals is May 11, 2013. More information can be found at <http://www.agls.org/>

Proposal Deadline in August

“Culture, Values, and Justice” is the theme of a conference scheduled for 2014 at the University of Vaasa, Finland.

The conference is sponsored by the University of Vaasa, Society for Indian Philosophy & Religion, and the Institute of Cross-Cultural Studies and Academic Exchange. The dates are May 21-23, 2014.

The deadline to submit a proposal is Aug. 10, 2013. Selected papers will be published subject to editorial review. Abstracts (150 words) may be submitted to Dr. Chandana Chakrabarti, chandanaachak@gmail.com

SciTS Conference in June

The Annual International Science of Team Science (SciTS) Conference will welcome attendees June 24-27, 2013, at Northwestern University, Evanston, Illinois.

The SciTS Conference is a forum to enhance understanding of how best to engage in Team Science to meet society's needs. The SciTS Conference serves: as a point of convergence for investigators studying science teams and Team Science leaders/practitioners; to engage funding agencies to provide guidance on developing and managing Team Science initiatives; and to afford data providers and analytics developers insight

into collaboration tracking and analysis needs. More information can be found at <http://www.scienceofteams.org/2013-conference>

4th Summer Institute in July

The Center for Engaged Democracy is soliciting presentations for its 4th annual summer research institute on *The Future of Community Engagement in Higher Education*. The institute will be held July 17-18, 2013, at Tufts University.

The institute will have three tracks: Strengthening Academic Programs in Community Engagement; Core Competencies in Civic Engagement, and the Impact of Online Education for Community Engagement. Individuals should present ongoing research and practices that contribute to these discussions.

Submissions will be reviewed on a rolling basis, with a final deadline of May 15, 2013. The submission portal can be found on the institute website at www.merrimack.edu/democracy. The submission abstract should be a maximum of 500 words. Inquiries and questions should be e-mailed to: democracy@merrimack.edu.

ISEA Symposium in Australia

The 19th Annual International Symposium on Electronic Art will be June 7-16 in Sydney, Australia. The Conference is presented by the Australian Network for Art and Technology (ANAT) and held alongside Vivid Sydney, a festival of light, music and ideas. The theme is “Resistance is Futile.” New York-based media artist Michael Naimark will give the opening keynote address. More information can be found at <http://www.isea2013.org/>

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JOBS IN INTERDISCIPLINARY STUDIES

Boston University seeks a visionary, innovative leader to become the next Dean of its College of General Studies. Applications will be accepted and reviewed on a rolling basis. The position is available July 1, 2013.

Benedictine University has an opening for an Executive Director to be responsible for the leadership and strategic direction of the Cooperation Education Program. The position will be based in Springfield, Illinois.

Norfolk State University has an opening for a tenure-track Assistant Professor of Interdisciplinary Studies.

The position will begin in August 2013 for the fall semester.

Northern New Mexico College is seeking an Assistant Professor of Humanities to teach general education courses and create interdisciplinary courses for an interdisciplinary BA program that has three concentrations: psychology, humanities, and Pueblo Indian Studies. Review of applications will begin May 10.

Look for more information on these position openings in the Jobs in Interdisciplinary Studies section on the AIS Website, www.miamioh.edu/ais.

About AIS

The Association for Interdisciplinary Studies is the U.S.-based international professional association devoted to interdisciplinary teaching (including service learning), research, program administration, and public policy. Interdisciplinarity integrates the insights of knowledge domains to produce a more comprehensive understanding of complex problems, issues, or questions. AIS serves as an organized professional voice and source of information on interdisciplinary approaches and the integration of insights from diverse communities to address complex problems in education and research. Founded in 1979, it is incorporated as a non-profit 501(c)3 educational association in the state of Ohio.

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