



Knowledge Cultures 2(4), 2014
pp. 25–48, ISSN 2327-5731

WORKING IN THE BORDER ZONE: DEVELOPING CULTURAL COMPETENCE IN HIGHER EDUCATION FOR A GLOBALIZED WORLD

JANE PALMER

janepalmer@fnq.net.au
School of Social Sciences
Faculty of Arts and Business
University of the Sunshine Coast

JENNIFER CARTER

jcarter@usc.edu.au
School of Social Sciences
Faculty of Arts and Business
University of the Sunshine Coast

ABSTRACT. In this paper we examine the tension between the educational needs of a globalized world and the institutional structures of a globalized education system. The globalized education system encompasses market-driven funding arrangements for both research and teaching in higher education, which depend on international ratings systems structured around traditional discipline areas. The development of these competitive market structures has resulted in the removal by institutions of 'unsuccessful' disciplines, and a risk-averse approach to cross-disciplinary, problem-focused research and curricula.

One of the most important consequences of this discipline-based education system is a missed opportunity to encourage reflexive thinking about discipline-based normative assumptions and world views. An advantage of interdisciplinary work is that it casts new light on the practitioner's own discipline, as well as enabling a critique of assumptions in other disciplines. A reflexive and critical approach to disciplinary knowledge is, we propose, one of the conditions necessary for cultural competence in both researchers and students. Yet just as it is now argued that the globalized world needs graduates who are culturally competent - cross-culturally aware, reflexive, engaged with community in messy non-discipline-specific problems, able to critique and integrate information from many knowledge sources and work collaboratively - the competitive global education system increasingly marginalizes the cultural and structural contexts which foster such cultural competence.

We provide two case studies in Indigenous Australia and the Pacific: both involve students and demonstrate the special quality and value of cultural competence and its connection with work across, and beyond, academic disciplines. We conclude that, while the political economy of the globalized education system is largely inimical to interdisciplinary work and the development of cultural competence, catalysing and supporting these processes is the responsibility of higher education institutions in a globalized world.

Keywords: interdisciplinarity; political economy of higher education; knowledge cultures

1. Introduction

Globalization and anti-globalization have produced critiques not only of neoliberal economic and ideological expansionism, but also of hidden norms and assumptions in the ways in which countries, and their culturally diverse inhabitants, deal with each other. They include critiques of international aid and development (Bankoff, 2001; Escobar, 1995; Tsing & Greenough, 2003), of immigration and asylum policies (Manderson, 2001; Szörényi, 2009; UNHCR, 2010), and of the global marketisation of education, research and social services (see for example OECD, 2009; King et al., 2013; Marginson, 2006). In education and research institutions, responses to globalization (and anti-globalization) have included exploration of cosmopolitanism and cultural competence ideas, and transdisciplinary and interdisciplinary teaching and research focused on complex ‘problems’ arising from globalization and interactions between economies, places and cultures. Research and development projects, as well as professional teaching programs, are framed as cross-sectoral, cross-cultural, multidisciplinary and multiple-stakeholder collaborations, often with explicit social justice goals.

This paper examines globalization and its implications for the education needs of students at university level. We introduce first the idea of globalization, which has expanded from economic processes into social and cultural spheres, and produced the idea of a cosmopolitan ‘citizen of the world’. We then point to the connection between, on the one hand, globalization and global citizenship, and on the other hand the cultural competence aims of higher education pedagogies. In doing so, we propose that cultural competence encompasses at an academic level a capacity to work at the intersection of a range of ‘knowledge-cultures’, initially in the form of interdisciplinary teaching and research, but then beyond, both across knowledge-cultures and in collaboration with community, practitioner, activist and government sectors.

We suggest however that there is a potential conflict between educating for cultural competence and the discipline-based political economy of university education. We use two case studies to draw a number of conclusions about ways of overcoming such institutional barriers and developing global citizens who can work effectively in the border zones of knowledge-cultures in a globalized world.

2. Globalization and its Dimensions

The idea of globalization as natural and inevitable (rather than driven by specific political and economic decisions), and a process through which all nations and people participate equally in a global free market economy, has been critiqued as fallacious on both counts (see Santos, 2006).

Mike Featherstone (2006) argues that while globalization began with economic processes, it has now brought about an acknowledged need for more cultural work “in understanding the others with whom we come into contact” (p. 390). He suggests that issues which were formerly analysed in terms of a political economy of nation-states and ‘games models’ now require approaches that are not only transnational but bring together expertise from several disciplines; he cites the example used by Barbara Adam of the 1986 Chernobyl explosion in the Ukraine, where understanding of the event required an analysis of “a complex network which linked together a nuclear explosion, weather patterns, milk production, radiated babies and the overseas aid ‘gifts’ of the British government” (p. 392). Global knowledge is thus a matter not only of understanding global markets and financial flows but of knowing more about cultural others and inter-cultural interaction, the connections between social and natural processes, and the political and ethical dimensions of both. This has implications for academic teaching and research: “... the tightening of the interdependency chains between human beings, and also between human beings and other life forms on planet Earth, suggests we need to start to think about the relevance of academic knowledge to the emergent global public sphere” (Featherstone, 2006, p. 392).

3. Global citizens: The idea of cosmopolitanism

Academic institutions have to some extent responded to globalization by recognizing the need for education to encourage interest in, and respect for, cultural difference. The cosmopolitan individual has been developed in academic literature as a citizen of the world, not merely a spectator but a participant (Cheah, 2006, p. 487). Appiah for example describes two strands to cosmopolitanism: taking an interest in the practices and beliefs

of others, and an acknowledgement of obligations to others (2006, p. xv). The cosmopolitan participant thus operates beyond the “banal cosmopolitanism of consumer culture”, and in accordance with a set of value-based commitments (Featherstone, 2006, p. 390), although Cheah argues that there remains a ‘normative deficit’ in economic cosmopolitanism: “The cosmopolitanism of corporate workers is essentially the cosmopolitanism of a new technocratic professional class whose primary aims in life are making a profit and conspicuous consumption. The only feelings of solidarity manifest here are to the global firm as a terrain for professional self-interest and advancement” (p. 492).

This echoes Ulrich Beck’s (1996) caution against confusing “global capitalists” with “global citizens”. Solidarity with the ‘global firm’ is the opposite of a value-based cosmopolitan consciousness – a “postnational understanding of politics, responsibility, the state, justice, art, science and public interchange” (Beck, 1996). Werbner (2006) suggests that a sense of responsibility beyond the local would need to include “elements of self-doubt and reflexive self-distanciation, an awareness of the existence and equal validity of other cultures, other values, and other mores” (p. 298).

A more critical and deeper definition of cosmopolitanism is part of a challenge to the apparently irresistible and totalizing force of globalization; such challenges draw attention to the local concreteness of ‘world problems’ which are grounded in the specifics of a location in the here and now (Beck, 1996), to the two-way interchanges which occur at the margins of global and local (Tsing, 1994; Marston et al., 2005), and to the organized resistance of those who are excluded or subordinated in the global market (Santos, 2006). Concreteness, local-global interchange, and resistance are reflected in vernacular cosmopolitanism, one “that is aware of the limitations of any one culture or any one identity and that is radically aware of its insufficiency in governing a wider society, but which nevertheless is not prepared to rescind its claims to the traces of difference, which makes its life important” (Hall, 2002, p. 30). It is reflected in resistant subaltern and ‘abject’ cosmopolitanisms which set out to disrupt the idea of cosmopolitanism as a global ‘god’s eye view’ (Gunew, 2013, p. 145), resistance described as insurgent cosmopolitanism (Santos, 2006, p. 397).

Gunew (2013) frames such resistant cosmopolitanism as a form of pedagogy, a process of being “ambushed by estrangement, the unexpected perspective that reveals something new within one’s own familiar iterations and taxonomies” (p. 136). In higher education, such ambushes, or at least the development of a more complex cosmopolitanism – reflexive, ethically critical, open to and valuing the distinctiveness of other cultures as well as one’s own - have become pedagogical goals for teachers of ‘cultural

competence'. This 'ambush' by the other is similar to Paulo Freire's dialogic pedagogy, in which both teacher and student open themselves to "the socio-political factors that construct the boundaries between their worlds" (Rule, 2011, p. 939, citing Freire), to develop a critical consciousness and begin "an emancipatory transformative process" (Taylor, 1998, p. 16). The cosmopolitan engagement with others is, in Ananta Kumar Giri's terms, a form of "knowing together" which creates "zones of both cognitive and emotional development" where participants "help each other to develop their potential as well as to complete each other" (Giri, 2011b, p. 20, citing Leo Vygotsky).

The following section expands on the reflexivity, openness and ethico-political dimensions of cultural competence.

4. Becoming a Global Citizen: Cultural Competence and its Dimensions

Cultural competence has been defined at its most basic level as a "mastery of verbal and non-verbal communication strategies" to solve communication problems across cultures (Xu, 2000, p. 477) and as a way of improving business performance (Bush et al., 2001). However it is more commonly defined within pedagogical objectives, particularly in the training of clinicians, as an awareness or knowledge of other cultures which can "enhance [clinicians] effectiveness with clients and promote social justice as an integral aspect of service provision" (West-Olatunji et al., 2011, p. 337). In these contexts it is seen as both a set of skills acquired through training, and as an ethical position. Both of these aspects – skills and ethics – are acknowledged for example in the following definition: "... cultural competence [is] knowledge, information, and data from and about individuals and groups that is integrated and transformed into clinical standards, skills, service approaches, policies, and marketing programs that match an individual's culture and increase the quality and appropriateness of healthcare and health outcomes" (Delphin-Rittmon et al., 2013, p. 54. See also Koehn, 2006).

However the assumption that cultural competence is simply an acquired skill has been criticised as producing a cultural 'knower' – the skilled practitioner - and a cultural 'known' – the subject to whom these skills are applied; this, suggests Hester (2012), fails the reflexivity test, an acknowledgement that the practitioner is also "culturally embedded" (p. 286). The idea of reflexivity in cultural competence, and the different relationship this produces between practitioner and client, is discussed below.

5. Reflexivity and openness

Reflexivity as a part of cultural competence has been defined as “self-awareness of one’s own cultural values, assumptions and biases” (Reich & Reich, 2006, p. 54), “cultural humility” (Hester, 2012), and the ability to “hold difference and alterity” (Kirmayer, 2013, p. 367-368). Others have suggested that reflexivity, as well as empathy and acceptance or appreciation of others, involves a ‘dispositional gratitude’ which may be enhanced through meditation (Jankowski & Sandage, 2013). These discussions of reflexivity suggest that cultural competence is an ongoing work, rather than a skill which, once learnt, is summoned only as required. Moreover, since every culture “is constantly evolving... in a never-ending ‘process of reinvention’” (Zoreda, 1997; Cole & Hager, 2010), cultural competence becomes a lifelong commitment to self-critique and reflection on the ‘social imaginaries’ which form our own and others’ identities (Kirmayer, 2013: 368). Cultural competence is thus a process and not an end-state (Reich & Reich, 2006, p. 54).

Zoreda (1997) argues for a more reflexive pedagogical approach to cultural competence in the education of foreign language teachers, one which enables them to teach on the ‘cultural faultline’ and create the classroom as a ‘sphere of interculturality’ where students and teachers can reflect on both their own and the other culture (p. 928). The aim of this reflective process is “the enlightenment and self-reflection of the learner on his or her own culture” (p. 928); as cultural ‘hybrids’ they are able to make a greater contribution to the world in an era of globalization (p. 931). These qualities of hybridity and lifelong reflexivity are also associated with the values-based cosmopolitanism discussed earlier.

Immersion in a different culture is another educational tool for encouraging students to think both about their own culture and the other. In one such outreach program for trainee counsellors “... students can witness the community’s authentic voice and indigenous healing practices... [T]he students were able to *become aware of their cultural encapsulation* and appreciate the strengths of the communities they served” (West-Olatunji et al., 2011, p. 344, our emphasis).

Thus the reflective culturally competent individual, like the cosmopolitan, has “strengths in all cultures” - a respect for and ability to work with people of any culture - and “strives towards a view where no singular world-view is normative” (Laws & Chilton, 2013, p. 176). The immersive learning experiences offered by West-Olatunji et al, the auto-ethnographic approach suggested by Michael Knipper (2013), and the meditative processes of Jankowski et al. (2013) and Cole & Throssell

(2008) are pedagogical tools for developing this reflexive cultural competence.

6. Ethics and politics

Beyond reflexivity, however, cultural competence may require a broader and more critical analysis of related normative frameworks, such as the assumptions underlying clinicians' bioethics principles (Laws & Chilton, 2013, p. 185).

Indeed cultural competence may also require a sharp political edge to address entrenched inequalities and racism: "Is culture the same as race? Is acknowledgement of or sensitivity to 'cultural difference' the same as actively working to eliminate racism, prejudice and discrimination as a source of health inequities?" (Hester, 2012, p. 282).

Kirmayer's (2013) discussion of cultural competence workshops for clinicians suggests that such teaching should produce not only a capacity to recognize structural inequalities and respect difference, but also a strong commitment to advocacy; to try to remain ostensibly 'neutral' is to perpetuate inequalities (p. 370). Cultural competence in this context is an ethical stance, an 'ethics of relation' between a practitioner and their client, to enable, for example greater client autonomy. In cross-cultural contexts, Kirmayer suggests, this relational ethics has much wider significance as a way of undoing some of the vestiges of colonial "domination and disparagement" (p. 369).

Reflexive and critical cultural competence in these descriptions is in fact *trans*-cultural. Rather than mastering the 'do's and don'ts' of engagement with a particular culture, the goal of educating for cultural competence is a set of "analytic, emotional, creative, communicative, and functional" capacities (Koehn, 2006, p. 140) to respond to different contexts and interactions across many cultures.

Moreover while there are clear applications of an ethics-based cultural competence in post-colonial transnational contexts, it can also be called upon in work across diverse sub-cultures within a single society, for example, where particular groups within a society have differential access to resources and services, such as education or health. Cultural competence in this context has two different meanings: at its simplest, it is a set of skills in navigating the systems of a society, skills demonstrated in successfully gaining access to services; from a more critical perspective, it could be argued that cultural competence includes a reflexive awareness and an ethical disposition to promote equitable access.

In our discussion below of the role of higher education institutions in developing cultural competence within the wider community, we take this

as a starting point: the idea of cultural competence as the capacity – in both teachers and students - to think critically about their own culture and to develop an ethical stance in relating to other cultures.

7. Learning Cultural Competence in the Academy: Thinking Across Disciplinary Boundaries

Academic disciplines have been described as cultures in themselves – each with its own epistemology, methods and norms – where competence requires not only formal study but “socialization” into the culture (Reich & Reich, 2006, p. 52). Engaging students in work across disciplines can be the beginning of a process of learning to understand and respect other ‘cultures’. In an example of interdisciplinary practice described by Reich et al (2006), graduate students are taken beyond mere exposure to theory and practices of other disciplines, to gain interdisciplinary *cultural* competence:

Through coursework, fieldwork, conferences, and workshops students are exposed to many other disciplinary cultures and mentored on how to collaborate effectively as well as how to integrate multidisciplinary tools and theories to address the research questions at hand. Further, in taking each disciplinary approach seriously, rather than as a superficial “add-on” to an existing discipline, trainees see interdisciplinary cultural competence modelled. With this grounding, the program expects its graduates to more successfully engage larger global problems that are not disciplinarily confined (p. 56).

Interdisciplinary work, which requires the practitioner to challenge and reflect upon their own ‘expert’ position (Kirmayer, 2013, pp. 367-368), can be one way of learning to recognize and respect the knowledge-cultures of others; it becomes a way of developing (inter-)cultural competence, as this description from Reich et al shows: “Specifically, each participant in interdisciplinary collaborations must value diversity, develop the capacity for self-assessment, work towards understanding one’s own disciplinary culture, and be sensitive to the dynamics inherent when cultures interact. Additionally, members of any interdisciplinary endeavour must be cognizant of power dynamics at play and avoid such things as tokenism, informal hierarchies, and disciplinary policing” (p. 51).

Reich et al also note that while multi-disciplinarity might be similar to multiculturalism – providing an environment “in which the plurality of perspectives can flourish without assimilation” (p. 53, footnote) – *interdisciplinary* work is aimed at opening up a new discursive space where hybrid solutions and analyses are possible. Thus interdisciplinarity

is not only respect for other (disciplinary) cultures and reflexivity about one's own, but an active and creative engagement with the other cultures. Enabling creativity and emergence in interdisciplinary work has been emphasised elsewhere, for example by Russell et al (2008, p. 470) who urge researchers to remain open, flexible and adaptable as interdisciplinarity "is a practice, not an institution". Schoot, Uiterkamp and Vlek (2007) suggest one benefit of interdisciplinarity is that researchers' reflection on their own cultural limitations and the value of others' perspectives, can lead to a re-framing of questions and outcomes in unexpected and important ways.

Respect, which is one outcome of reflexivity and openness, is acknowledged as essential to the success of interdisciplinary work:

Our success in learning to work together has come from a desire to understand the 'other's' discipline... Often, insights into these are difficult to pass on to an outsider since they are known through years of participation.There can be a sense of excitement in grasping aspects of the knowledge base of another discipline...The goal is not to 'become' a nurse, economist or doctor, but to develop insight into the other's perspective and to enjoy and respect collaborators' mastery of their subject, and to receive the same respect in return (Corner & Normand, 2001, p. 834).

However interdisciplinary work is fraught with professional sanctions and funding difficulties, some of which are canvassed below.

8. Institutional challenges

Giacomini (2004) notes that there is "surprisingly little analysis of the institutional and intellectual demands of interdisciplinarity as a methodology or practice" (p. 177). Even where the benefits and challenges of interdisciplinarity are acknowledged, "deeper understandings of the processes involved still need to be explored" (Bracken and Oughton, 2009, p. 371).

For researchers, the challenges for interdisciplinary work are well known: "Tenure and promotion committees, journals, and even one's own agency or department can communicate their disapproval by failing to recognize the significance of the results of such collaborations" (Reich & Reich, 2006, p. 59).

At the level of doctoral research, penalties for interdisciplinary projects include longer time frames for completion, reduced access to employment and funding opportunities, and difficulties in developing a "coherent

publication track record” (Manathunga et al., 2006, p. 368). Students may also have to deal with conflicting supervisors’ perspectives and “difficulties in attempting to bridge disciplinary intellectual and administrative silos” (Manathunga et al., 2006, p. 368).

As a result of these challenges, new areas of interdisciplinary studies such as communications, cultural studies and environmental studies have begun to “professionalize or departmentalize themselves” (Wernick, 2006, p. 562). This process has been described ‘synthetic multidisciplinary’, where several old disciplines are synthesised into a new one (Sillitoe, 2004, p. 8, citing Lockeretz). Marybeth Shinn (2006) suggests that it may be only more established researchers who are able to challenge the reward systems embedded in existing “academic silos” and funding agencies.

9. Pedagogical challenges

The teaching of interdisciplinary thinking to higher education students also encounters challenges, which arise from the same economic and institutional factors that inhibit research across knowledge-cultures. The connection of many universities with industry research and development funding, and the associated requirements for “bottom-line accounting and accountability” (Bishop, 2006, p. 565) has been blamed for a shift away from undergraduate teaching to an emphasis on metrics-friendly discipline-based research and publication. This emphasis on research outputs rather than undergraduate teaching has prevented any change in the strictly discipline-based structure for undergraduate education, now constructed as an apprenticeship for the research-focused professoriate (Wernick, 2006, pp. 558-559).

At the doctoral level, the change in funding models for universities has increased the number of students working on applied, industry-related projects, without a systematic development of the interdisciplinary research skills needed to produce knowledge which is “contextualized, applied and transdisciplinary” (Manathunga et al., 2006, pp. 365-367). Proponents of transdisciplinary doctorates have argued that doctoral pedagogy should enable ‘problem-focused’ thinking, and that the outcomes of transdisciplinary research should include not only publications but a change in ‘real world situation’ and ‘transformational learning’ of all those involved (Wickson et al., 2006, pp. 1056-1057; Mitchell & Willetts, 2009, p. 6). Supporting these goals requires transformative and situated learning experiences, intercultural knowledge and skills, reflexive thinking and enhancement of “higher order thinking” (Manathunga et al., 2006, p. 368). It requires, in Giri’s terms a problem-solving approach characterised by “self-reflection, self-transformation, and self-transcendence” (Taylor, 2011,

p. 15, citing Giri). (For an overview of work by Paulo Freire, Robert Boyd and Jack Mezirow in the area of transformative learning, see also Taylor, 1998, pp. 5-20).

Learning how to do situated interdisciplinary research entails not only different cognitive processes, but a capacity to engage in dialogue and exchange with those in other disciplines (Manathunga et al., 2006, pp. 368-369). Manathunga et al liken the stages of interdisciplinary thinking to an “intercultural border crossing”, where the first stage of cultural relativism or acceptance of different beliefs and practices is succeeded by “radically revaluing one’s own inquiry to incorporate the questions, methods, and perspectives of others” (p. 369, quoting Cornwell and Stoddard, 2001). Drawing on examples at undergraduate level, the authors suggest that interdisciplinary courses are valuable in developing these skills “because they expose students to multiple, sometimes conflicting perspectives and encourage them to actively construct and apply knowledge” (p. 369).

While this form of pedagogy has been shown to sometimes be “cognitively, emotionally and socially threatening work for teachers and students” (Manathunga et al., 2006, p. 371), it can also assist in breaking down students’ stereotypes about other disciplines and give them a better understanding of “how knowledge operates” within other disciplines (pp. 373-374). In these respects, interdisciplinary understanding resembles the engaged, values-based and ‘state-of-mind’ cosmopolitanism (Cheah, 2006; Featherstone, 2006; Werbner, 2006) discussed at the beginning of this paper.

Some areas of research and teaching however have extended beyond academic disciplines and into other kinds of knowledge: “Indigenous knowledge research not only sees disciplinary boundaries becoming increasingly permeable, even breaking down, but also advocates that we begin to think differently, in arguing, as anthropology has done for decades, that we listen to other cultural voices and learn something about their ways of knowing the world rooted in different knowledge traditions” (Sillitoe, 2004, p. 20).

In the following section we examine the idea of interdisciplinarity as a form of cultural competence which extends into knowledge-cultures outside the academy.

10. Practicing Cultural Competence in the Academy and Beyond

Knowledge is usually associated with an exclusionary elitism and expertise and we are challenged to embody a new art of sharing and border-crossing (Giri, 2011a).

The practice of interdisciplinary collaboration requires real work at the boundaries between disciplines and cultures (Knipper, 2013, p. 380). However it has also taken on a different and more inclusive meaning; Horlick-Jones et al (2004) suggest that ‘border work’ can make connections “not only across the boundaries between disciplines, but also between scholarly inquiry and the sphere of tacit and experiential knowledges” (pp. 442-445), that is, between knowledge-cultures which include, but are not restricted to, academic disciplines.

The ethical drive for such engagement was reflected in Jane Lubchenco’s (1998) claim that the 21st century would be one in which science would embrace a new social contract in the face of rapid environmental change. Lubchenco’s agenda required recognition of the connections between ecological systems and “human health, the economy, social justice and national security” (p. 491). Scientific commitment to this social contract was essential in view of the complexity of global challenges, the public monies provided to support scientific endeavour, and the need for public/government participation in agenda setting. Such wider publics have diverse social agendas and priorities. In the early 1970s, Rittel and Webber (1973) noted the impact on social sciences of “the growing awareness of the nation’s pluralism and of the differentiation of values that accompanies differentiation of publics” (p. 156). They questioned the role of the professions as instruments for “perfecting” the future (p. 158) in the face of such diverse values and objectives. The response has been dialogue at the ‘cultural faultline’ (Zoreda, 1997, p. 928), exemplified in action research which requires collaboration among scholars, community coalitions and representatives of agencies and institutions at local, regional and national levels programs (Stokols, 2006, p. 64). Stokols however notes the potential for misunderstandings in collaborations between academic experts and wider publics:

... community decision-makers and citizen groups typically give highest priority to the goals of empowering community members, promoting social justice, and enhancing public health... whereas academicians are more strongly influenced by the “politics of research” ... associated with the quest for grant funding and publications. These different motives and incentives for engaging in action research can provoke disagreements and resentments among university- and community-based team members (p. 70). (See also Jacobs, 2010 for a discussion of conflicting objectives in participatory action research).

In these cross-sectoral contexts, cultural competence of researchers becomes the ability to think reflexively about their own disciplines and the power imbalances between academic and community-based team members, and the development of practices (in communication, coordination, mentoring) to resolve potential conflicts and tensions surrounding competing interests, values and definitions of success (Smyth & Whitehead, 2012, pp. 70-73).

Examples of cross-sectoral, cross-cultural collaboration, and the particular kind of border work they require, include the work of academics who are also activists; they must learn to translate not only between disciplines but between academic, bureaucratic, legal and activist language, “between different frames of reference in the interest of more effective communication” (Mackie, 2013, p. 298). In the case of human rights activists, for example, this work of translating and mediating takes place not only with the university, “but in all of the spheres where discussion of human rights take place” (Mackie, 2013, p. 299). The work of translating and mediating has been described as ‘adisciplinarity’, where a researcher’s priority becomes, not the production of peer-reviewed publications, but “more grey or popularized literature for lay, professional, media or policy audiences” (Giacomini, 2004, p. 181).

Hence the most complex and challenging ‘border work’ may lie not in collaborations across disciplines, but with those outside the academy, with “nonprofessional voices and perspectives” (Kirmayer, 2013, pp. 367-368). It is in this border zone that the connection between interdisciplinarity and (cross-) cultural competence becomes less of an analogy, and more a concrete set of practices of engagement between knowledge-cultures (see Cole & Pullen, 2010). Those working in this zone may be in an uneasy position – “at the intersection of multiple social roles and individual choices” (Zoreda, 1997) – but acquiring such hybridity, suggests Zoreda, can give the learner the capacity to challenge the totalizing and reductionist tendencies of globalization (p. 931).

The two case studies below illustrate the ways in which academic institutions might provide a pathway to a values-based cultural competence and the capacity to challenge the assumed trajectories of globalization. Each project brought together the knowledges of both researchers (including student participants) and community members, to produce a change in practices ‘on the ground’. The design of this type of project can often readily be modified to offer undergraduate or research students an ‘immersion’ opportunity to learn from other knowledge cultures, both academic and vernacular, and to develop a more reflexive and committed approach to research.

11. Case Studies

Case Study 1

The first interdisciplinary case study involved collaboration between a geographer [the project coordinator and one of the authors of this paper (Carter)], an anthropologist and a political scientist, as well as collaboration with the public – that is, with the indigenous people of regional Queensland. The historical framework for the project is explained below.

Land tenure across Australia for Aboriginal people is complex and its contestation unfolding. Aboriginal people who live in areas where they do not have inalienable freehold, as is the case in many parts of rural and regional Australia, have had, under recent settler legislation, to prove their ‘connection’ to specific tracts of land in order to assert their resource rights and interests. Proving this connection is required in native title claims, despite the difficulties involved because of the dynamic nature of land boundaries (Rambaldi et al., 2006). Further, many of the ‘Stolen Generations’ are still discovering, or are unable to claim, any such connection because of the historical processes of displacement from their traditional lands onto distant reserves, or simply because of need to migrate for work. An inability to prove connection to ‘country’ results not only in inability to claim title, but loss of access to culturally significant places, associated duties and rights, and limited understanding within non-Aboriginal society of the ongoing attachments to land held by many Aboriginal people (Byrne & Nugent, 2004; Howitt, 2006; Hunt & Smith, 2006).

Johnson and Murton (2007) claim that academic disruptions between the concepts of nature and culture have disenfranchised Indigenous knowledges and voices; we propose that drawing together conventional discipline-based research and knowledge produces greater cultural competency for all, including community groups.

The separation of knowledge about culture and nature is demonstrated particularly in the World Heritage arena. The language of ‘World Heritage values’ provides shared labels for all involved, but differing constructs and assumptive worlds, which can divide discussions on management issues, stakeholder concerns, research directions, agency responsibilities and the very nature and ‘attributes’ of the environment in question. This confusion also reflects pervasive discipline and practice-specific conceptual and operational meanings of ‘values’ (Reser & Bentrupperbäumer, 2005, p. 126). In our interdisciplinary project on Fraser Island, we noted that its nomination to the World Heritage register depended on recommendations of the Commission of Inquiry into the Conservation, Management and Use of Fraser Island and the Great Sandy Region (1991). Among its

recommendations were that Aboriginal people be involved in co-management, community-based management, leaseback arrangements, and land settlements, but that also interdisciplinary natural and cultural projects that transcend nature and culture be devised and conducted. This is reflected in the island's plan of management (EPA Queensland, 2005), which states that: "... recognition will be given to the value and importance of Indigenous management practices and the complementary role they have in natural and cultural resource management in the Region" (p. 29).

However when the project team spoke with Aboriginal people in the area, they overwhelmingly said that "... although [name of agency] have looked after this place for thirteen years environmental management is put higher than the World Heritage thought it would be" (pers. comm., Aboriginal interviewee to author (Carter), December 2005).

Management approaches which disconnect culture from nature also reflect the erasure of Aboriginal people from a contemporary lived landscape; in the postcolonial landscape, Aboriginal people are either involved only in cultural pursuits, or only involved in authentic environmental management if it is pre-invasion and static. However Aboriginal residents assert their contemporary lived connection in terms of their residential and economic interests: "... so young people don't have to leave. For example, why can't they be trained for jobs like a police officer at Eurong" (pers. comm., Aboriginal interviewee to author (Carter), December 2005) "They want people to dance and talk on their tourist boats but why not offer employment on tourist boats?" (pers. comm., Aboriginal interviewee to author (Carter), August 2006) "Nearby old mines are opening up and we would like mining inductions, jobs, qualifications, training ...in job readiness, driving, resumé's, and good health which could occur at negotiation tables..." (pers. comm., Aboriginal interviewee to author (Carter), January 2006).

While an Indigenous mode of occupancy in rural and regional landscapes has been defined as one of 'post-productivist values' (Holmes, 2010, p. 268), where protection values are emphasised over production and consumption, this construction does not match the lived realities of many people who wish to be seen as performing all aspects of their rural worlds without risking dismissal as inauthentic.

We concluded in this project that social cartographies should be used to map place-based 'values' that intertwine nature *and* culture to produce nature-culture hybrids – interwoven forms of natural and cultural planning and protection. Social mapping crosses disciplines and knowledge-cultures to manifest hybrid values through identifying jobs, school programs, meanings attributed to particular places or journeys in different parts of the landscape, coastal protection, water quality planning, the history of a place,

recognition by government authorities and other agencies, governance and resourcing of Indigenous structures, ongoing native title claim process and their impacts on people's attachments to that place. As these forms of planning and protection interweave they are illuminated by new forms of interdisciplinary research aimed at showing "... how things are increasingly mixed together in our highly technologised societies, such that the boundaries between such things as nature and society begin to 'blur'" (Braun, 2005, p. 836).

Such nature-culture research develops a form of cultural competence which can produce an innovative approach to addressing sustainability and a way of redressing social inequities. An undergraduate student placement formed part of the research team's work; the student assisted with literature analysis, field work and networking, and graduated with greater cultural competency skills as evidenced by her subsequent employment in the interdisciplinary Indigenous community development sector.

Case Study 2

In 2009, the Head of the United Nations Food and Agriculture Organisation (FAO), carried out a 24 hour hunger strike, prior to the opening of the World Food Summit in Rome. He stated: "We have the technical means and the resources to eradicate hunger from the world so it is now a matter of political will, and political will is influenced by public opinion" (Blay-Palmer, 2010, p. 3, quoting Jacques Diouf).

Prior to Diouf's hunger strike, *National Post* columnist Terence Corcoran had criticised the 2008 United Nations report: *Food Sustainability: a Guide to Private Sector Action* because it relied on the same actors who created the food crisis to solve its problems (quoted in Koc, 2010, p. 38). Koc himself was particularly concerned about the wholesale enrolment of smallholders into larger food systems because of their fixation on food security, political stability and feeding the world (with cheap labour), without recourse to what he called the "social and geographic inequalities in income, wealth and consumption patterns between north and south, rich and poor, and market power" (Koc, 2010, p. 39).

Social scientists have noted that despite the small-scale nature of organic farms, the ten largest firms in agriculture control around 80% of the organic market, and food retailing is similarly concentrated (Levitte, 2010, p. 77, citing a report prepared Renner, Sweeney and Kubit, 'Green jobs: Towards sustainable work in a low carbon world' for UNEP, ILO and ITUC). Imbalances in marketing and sales consolidate the power of these companies and increase the income losses from small and otherwise marginalised farmers and producers. Although it has been argued that there

is room for both progressive large farmers (who are interested in change and are more able to adequately remunerate their workers), and smaller farmers who can offer food for sale direct from the farm, Hinrichs (2010) reminds us that the affluent consumer is far more likely to 'buy local' than to 'buy black' or to 'buy union'.

Amid climate change, global hunger, poverty and inequity, the pressing and interdisciplinary challenges of our future include fundamental human rights to food, to economic sustenance, and to fair and safe working conditions. Interdisciplinary food studies has become a priority study area, currently focused on either commercial food production or study of alternative food networks (such as farmers markets, local niche branded products and food box schemes). H  l  ne St Jacques (2010) distinguishes between these literatures on the basis of consumers "shopping the world" versus those advocating "the locavore explosion".

So one might ask at this point: what can a geographer, an agricultural scientist and a market economist together offer to food studies?

Traditional food systems of Pacific Island nations are now rapidly being absorbed into globalised production because of the 'export or perish' mantra (coined by Murray, 2001, p. 135). Subsistence food production is now mixed with surplus trade of coffee, cocoa or copra or off-farm income. In a project we conducted in Vanuatu in 2009, we tested some contemporary framings of commercial and alternative food systems and the various possibilities for hybridity in food production and consumption. The project involved developing processing technologies for an indigenous nut species, *Canarium indicum*, building capacities and capabilities through a rural community development approach, and linking with marketing research analysis.

From observations, semi-structured discussions and document analyses four key themes emerged that revealed emerging hybrid forms of food production and consumption:

Social and economic infrastructure: Concerns about whether to invest money in new infrastructure because of the costs to farmers, were alleviated through a proposal to piggyback small systems onto large scale social and economic infrastructure. In this case, the buying points of large cocoa firms were enrolled into a new system to collect local nuts from farmers without substantial need for additional farmer investment or cost recovery.

Traditional practice and new agricultural processing technologies: Some participants at a community meeting we attended were concerned the *Canarium* nut industry was no longer traditional, and predicted that processors would dominate the industry. There were calls at the meeting to ignore 'the grower-processor divide' – participants felt that all actors

needed to make a profit and work as a team or the entire system would fail. An analogy of agro-forestry was provided by one person, who suggested that agro-forestry was ‘an old system’ in which new technologies were simply added to the diverse cropping and husbandry practices used by farmers.

Institutions: Thirdly, a new hybrid institutional form mimicking the ‘briefcase NGOs’ described by Friedberg and Goldstein (2011, p. 28) emerged that was simultaneously public, private, international, indigenous, educative, research- and profit-oriented. A representative of this institution described his performance of international and indigenous roles, seeker of private and public funding, and the need to influence business and power elites.

Temporal staging: Increasingly the ‘alternative’ food system was just as contested as the ‘conventional, as one participant noted: “One central processing factory doing it right may be better than smaller and dispersed without quality assurance. But others like wine work the other way. The market will determine this. So there’s short term and long term considerations. But a large factor will be quality. Is this the optimum model for the medium term?”

The temporal scales of industry development were not mutually exclusive and in fact, neither were seen as the optimal model; medium term opportunities were seen as the most flexible solution. A hybrid food system had resulted that was more complicated than a commercial/alternative dualism, and connected multiple sites as well as economic, political and technological interdependencies between growers, processors and other supply chain actors. Wealthy farmers were increasingly able to afford costly inputs and withstand extremes but there remained concern for others as illustrated by one person who commented: “How is Vanuatu going to compete in international markets with PNG with its 1,000,000 trees)? The land mass and population of Vanuatu – will we adopt the system of PNG? We can raise 100,000 seedlings. The land tenure variable - so how do we put this into the Vanuatu system?”

Seminal theories of alternative food geographies proposed by Whatmore and Thorne (1997) in the 1990s led to discussions on the boundaries of (export or local) scale, and showed that interpenetrations between space and time collapse these boundaries, increasing intermixing global and local food systems. These remixes are changing social life as money, phones, computers, documents, devices, people, capacities and production politics increasingly circulate, connect with each other and change the material and intangible flows in the networks in which each are involved. Researching and working with these relational, networked and

unstable systems requires collaboration across a number of disciplines – social and technological – and with the knowledge cultures of the communities involved, in ways that require cultural competence in the broadest sense defined in this paper.

A student's Honours research was conducted alongside the team's work, and together they resulted in richer experiences and analyses, an enhancement of the student's cultural competence, and her subsequent employment to continue working with Pacific communities in research and development. However, in general and in line with the findings of Manathunga et al (2006), the political economy of global education militates against such student immersion, through increased institutional aversion to risk, unwillingness to fund the cost of field travel, and production pressures on supervisors' time which reduce the time available for undertaking and overseeing student involvement in such projects.

12. Conclusion

Our discipline-based knowledges currently fail to connect nature-culture and commercial-alternative food systems; the two case studies above represent “distinct regions between which nothing is supposed to take place but in which most things are happening” (Bruno Latour 1993, quoted in Whatmore & Thorne, 1997).

As a pedagogical objective, cultural competence in its most significant sense – an ongoing commitment to ethical, reflexive and respectful collaboration beyond disciplines – can begin with interdisciplinary work in the academy. Such work requires ‘acknowledgement and reward’ structures for teachers and students, within institutions, funding bodies and academic peers and publishers.

However cultural competence is not simply the capacity to work at the border between disciplines, or to practice a profession in a way which is culturally sensitive to clients. Disciplinary and specialized knowledge already intersects with a diverse range of knowledge cultures outside the academy, in ways which have the potential to be both challenging and productive. As with the immersive experiences described by West-Olatunji et al (above), the impact upon students of engagement both with scholars from other disciplines and with real communities, can be a transformative step towards cultural competence. Self-reflection, ethico-political analysis and engagement with the concrete practices of other knowledge cultures, is work which students can begin during their education, through projects which require both intellectual and personal commitment. This is a form of Paulo Freire's liberatory pedagogy that operates in a border zone where

teachers, students and communities “learn each other’s words and worlds ...and the boundary between them becomes a boundary within that they cross, transgress, redefine” (Rule, 2011, p. 938). Catalysing and supporting these processes, for example through involving students in the kinds of projects described above, is the responsibility of higher education institutions in a globalized world.

REFERENCES

- Appiah, K.A. (2006), *Cosmopolitanism: Ethics in a World of Strangers*. New York: W.W. Norton and Company.
- Bankoff, G. (2001), "Rendering the world unsafe: 'Vulnerability' as Western discourse," *Disasters*, 25 (1): 19-35.
- Beck, U. (1996), "The Cosmopolitan Manifesto," *New Statesman*, 127 (4377).
- Bishop, R. (2006), "The global university," *Theory, Culture & Society*, 23 (2-3): 563-566.
- Blay-Palmer, A. (2010), "Imagining sustainable food systems," in A. Blay-Palmer, (ed.), *Imagining Sustainable Food Systems: Theory and Practice*. Farnham: Ashgate, 3-16.
- Braun, B. (2005), "Writing geographies of hope," *Antipode*, 37 (4): 834-841.
- Bush, V.D., Rose, G.M., Gilbert, F., and Ingram, T.N. (2001), "Managing culturally diverse buyer-seller relationships: The role of intercultural disposition and adaptive selling in developing intercultural communication competence," *Journal of the Academy of Marketing Science*, 29 (4): 391-404.
- Byrne, D. and Nugent, M. (2004), *Mapping Attachment: A Spatial Approach to Aboriginal Post-Contact Heritage*. Sydney: NSW Department of Environment and Conservation.
- Cheah, P. (2006), "Cosmopolitanism," *Theory, Culture & Society*, 23 (2-3): 486-496.
- Cole, D.R. & Hager, P. (2010), "Learning-practice: The ghosts in the education machine," *Education Inquiry*, 1 (1) 21-40.
- Cole, D.R. & Pullen, D.L., (eds.) (2010), *Multiliteracies in Motion: Current Theory and Practice*. London & New York: Routledge.
- Cole, D.R, & Throssell, P. (2008), "Epiphanies in action: Teaching and learning in synchronous harmony," *The International Journal of Learning*, Volume 15, Issue 7, 175-184.
- Commission of Inquiry into the Conservation, Management and Use of Fraser Island and the Great Sandy Region, (1991), *Report*. Brisbane: Q. Government.
- Corner, J. and Normand, C. (2001), "Working together: Crossing discipline boundaries to evaluate complex interventions," *Nursing Times Research*, 6 (5): 829-836.
- Delphin-Rittmon, M.E., Andres-Hyman, R., Flanagan, E.H., and Davidson, L. (2013), "Seven essential strategies for promoting and sustaining systemic cultural competence," *Psychiatric Quarterly*, 84 (1): 53-64.

- EPA Queensland (2005), *Great Sandy Region Management Plan 1994* - Brisbane: Environmental Protection Agency, at http://www.nprsr.qld.gov.au/managing/plans-strategies/great_sandy_region.html [accessed 21 October 2013].
- Escobar, A. (1995), "Imagining a post-development era," in J. Crush, (ed.), *Power of Development*. London: Routledge, 205-222.
- Featherstone, M. (2006), "Genealogies of the global," *Theory, Culture & Society*, 23 (2-3): 387-419.
- Freidberg, S. and Goldstein, L. (2011), "Alternative food in the global south: Reflections on a direct marketing initiative in Kenya," *Journal of Rural Studies*, 27: 24-34.
- Giacomini, M. (2004), "Interdisciplinarity in health services research: Dreams and nightmares, maladies and remedies," *Journal of Health Services Research and Policy*, 9 (3): 177-183.
- Giri, A.K. (2011a), "Poser: Gift of knowledge: Knowing together in compassion and confrontation," *Sociological Bulletin*, 60 (1): 1-6.
- Giri, A.K. (2011b), "The Rejoinder: Seeking together: Towards a festival of co-realizations," *Sociological Bulletin*, 60 (1): 18-26.
- Gunew, S. (2013), "Estrangement as pedagogy: The cosmopolitan vernacular," in R. Braidotti, P. Hanafin, and B. Blaagaard, (eds.), *After Cosmopolitanism*. Oxford: Routledge, 132-150.
- Hall, S. (2002), "Political belonging in a world of multiple identities," in S. Vertovec, and R. Cohen, (eds.), *Conceiving Cosmopolitanism: Theory, Context and Practice*: Oxford University Press, 25-31.
- Hester, R.J. (2012), "The promise and paradox of cultural competence," *HEC Forum*, 24 (4): 279-291.
- Hinrichs, C. (2010), "Conceptualizing and creating sustainable food systems: How interdisciplinarity can help," in A. Blay-Palmer, (ed.), *Imagining Sustainable Food Systems: Theory and Practice*. Farnham: Ashgate, 17-35.
- Holmes, J. (2010), "The multifunctional transition in Australia's tropical savannas: The emergence of consumption, protection and Indigenous values," *Geographical Research*, 48 (3): 265-280.
- Horlick-Jones, T. and Sime, J. (2004), "Living on the border: knowledge, risk and transdisciplinarity," *Futures*, 36: 441-456, at www.cgee.org.br/atividades/redirKori/190.
- Howitt, R. (2006), "Scales of coexistence: Tackling the tension between legal and cultural landscapes in post-Mabo Australia," *Macquarie Law Journal*, 6: 49-64.
- Hunt, J. and Smith, D.E. (2006), *Further key insights from the Indigenous Community Governance Project*. Canberra: ANU, at http://caepn.anu.edu.au/sites/default/files/Publications/WP/Key_Insights_ICGP_2006.pdf [accessed 21 October 2013].
- Jacobs, G. (2010), "Conflicting demands and the power of defensive routines in participatory action research," *Action Research*, 8 (4): 367-386.
- Jankowski, P.J. and Sandage, S.J. (2013), "Meditative prayer and intercultural competence: Empirical test of a differentiation-based model," *Mindfulness*, doi:DOI 10.1007/s12671-012-0189-z.

- Johnson, J.T. and Murton, B. (2007), "Re/placing native science: Indigenous voices in contemporary constructions of nature," *Geographical Research*, 45 (2): 121-129.
- King, R., Marginson, S., and Naidoo, R., (eds.) (2013), *Handbook on Globalization and Higher Education*. Cheltenham, UK: Edward Elgar.
- Kirmayer, L.J. (2013), "Embracing uncertainty as a path to competence: Cultural safety, empathy, and alterity in clinical training," *Culture, Medicine and Psychiatry*, 37: 365-372.
- Knipper, M. (2013), "Joining ethnography and history in cultural competence training," *Culture, Medicine and Psychiatry*, 37: 373-384.
- Koc, M. (2010), "Sustainability: A tool for food system reform," in A. Blay-Palmer, ed., *Imagining Sustainable Food Systems: Theory and Practice*. Farnham: Ashgate: 37-45.
- Koehn, P.H. (2006), "Health-care outcomes in ethnoculturally discordant medical encounters: The role of physician transnational competence in consultations with asylum seekers," *Journal of Immigrant and Minority Health*, 8 (2): 137-147.
- Laws, T. and Chilton, J.A. (2013), "Ethics, cultural competence, and the changing face of America," *Pastoral Psychology*, 62 (2): 175-188.
- Levitte, Y. (2010), "Thinking about labour in alternative food systems," in A. Blay-Palmer, (ed.), *Imagining Sustainable Food Systems: Theory and Practice*. Farnham: Ashgate: 71-86.
- Lubchenco, J. (1998), "Entering the century of the environment: A new social contract for science," *Science*, 279 (5350): 491-497.
- Mackie, V. (2013), "Introduction: Ways of knowing about human rights in Asia," *Asian Studies Review*, 37 (3): 293-301.
- Manathunga, C., Lant, P., and Mellick, G. (2006), "Imagining an interdisciplinary doctoral pedagogy," *Teaching in Higher Education*, 11 (3): 365-379.
- Manderson, D. (2001), "The care of strangers," *Res Publica*, 10 (2): 1-4, at <http://www.cappe.edu.au/docs/pdf/ResPublicavol102.pdf>.
- Marginson, S. (2006), "Dynamics of national and global competition in higher education," *Higher Education*, 52 (1): 1-39.
- Marston, S., Jones III, J.P., and Woodward, K. (2005), "Human geography without scale," *Transactions of the Institute of British Geographers*, 30: 416-432.
- Mitchell, C. and Willetts, J. (2009), "Zen and the Art of Transdisciplinary Postgraduate Studies: Quality Criteria," *Australian Learning and Teaching Council: Report on ALTC Fellowship*, at <http://www.isf.uts.edu.au/publications/mitchellwilletts2009IDTDPGQualityCriteria.pdf>.
- Murray, W.E. (2001), "The second wave of globalisation and agrarian change in the Pacific Islands," *Journal of Rural Studies*, 17 (2): 135-148.
- OECD (2009), *Contracting Out Government Functions and Services: Emerging Lessons from Post-Conflict and Fragile Situations*. Paris: Organisation for Economic Co-operation and Development.
- Rambaldi, G., Kwaku Kiem, P.A., McCall, M., and Weiner, D. (2006), "Participatory spatial information management and communication in developing countries," *Electronic Journal of Information Systems in*

- Developing Countries: Special Issue on Participatory Geographical Information Systems and Participatory Mapping*, 25 (1): 1-9.
- Reich, S.M. and Reich, J.A. (2006), "Cultural competence in interdisciplinary collaborations: A method for respecting diversity in research relationships," *American Journal of Community Psychology*, 38: 51-62.
- Reser, J.P. and Bentrupperbäumer, J.M. (2005), "What and where are environmental values? Assessing the impacts of current diversity of use of 'environmental' and 'World Heritage' values," *Journal of Environmental Psychology*, 25 (2): 125-146.
- Rittel, H.W.J. and Webber, M.M. (1973), "Dilemmas in a general theory of planning," *Policy Sciences*, 4: 155-169.
- Rule, P. (2011), "Bakhtin and Freire: Dialogue, dialectic and boundary learning," *Educational Philosophy and Theory*, 43 (9): 924-942, doi:DOI: 10.1111/j.1469-5812.2009.00606.x.
- Russell, A., Wickson, F., and Carew, A. (2008), "Transdisciplinarity: Context, contradictions and capacity," *Futures*, 40 (5): 460-472.
- Santos, B. (2006), "Globalizations," *Theory, Culture & Society*, 23 (2-3): 393-399.
- Schoot Uiterkamp, A.J.M. and Vlek, C. (2007), "Practice and outcomes of multidisciplinary research for environmental sustainability," *Journal of Social Issues*, 63 (1): 175-197.
- Sillitoe, P. (2004), "Interdisciplinary experiences: working with Indigenous knowledge in development," *Interdisciplinary Science Reviews*, 29 (1): 6-23.
- Smyth, D. and Whitehead, P. (2012), *Reflections on Researching and Developing Indigenous Livelihoods on Country: Discussion Paper*. Darwin: Charles Darwin University, at <http://www.track.org.au/publications/registry/track1802> [accessed 28 August 2013].
- St Jacques, H. (2010), "The nexus between alternative food systems and entrepreneurship: Three local stories," in A. Blay-Palmer, ed., *Imagining Sustainable Food Systems: Theory and Practice*. Farnham: Ashgate: 135-156.
- Stokols, D. (2006), "Toward a science of transdisciplinary action research," *American Journal of Community Psychology*, 38: 63-77.
- Szörényi, A. (2009), "Till human voices wake us: Responding to refugee testimony," *Life Writing*, 6 (2): 173-191.
- Taylor, B. (2011), "Response to Giri: Civil society, social movements and alternative development: Implications of Giri's notion of knowledge," *Sociological Bulletin*, 60 (1): 13-16.
- Taylor, E.W. (1998), "The Theory and Practice of Transformative Learning: A Critical Review," *Information Series No 374*, 2006 (27 September).
- Tsing, A.L. (1994), "From the margins," *Cultural Anthropology*, 9 (3): 279-297.
- Tsing, A.L. and Greenough, P. (2003), "Agrarian Allegory and Global Futures," in P. Greenough, and A.L. Tsing, eds., *Nature in the Global South*. Durham and London: Duke University Press: 124-169.
- UNHCR (2010), "Safeguards needed as Australia's suspension of asylum claims by Sri Lankans and Afghans comes into force," *Press release 16 April*, at http://unhcr.org.au/pdfs/100416_aulpress.pdf.
- Werbner, P. (2006), "Vernacular Cosmopolitanism," *Theory, Culture & Society*, 23 (2-3): 496-498.

- Wernick, A. (2006), "University," *Theory, Culture & Society*, 23 (2-3): 557-563.
- West-Olatunji, C., Goodman, R.D., Mehta, S., and Templeton, L. (2011), "Creating cultural competence: An outreach immersion experience in Southern Africa," *International Journal for the Advancement of Counselling*, 33 (4): 335-346.
- Whatmore, S. and Thorne, L. (1997), "Nourishing networks: Alternative geographies of food," in D. Goodman, and M. Watts, eds., *Globalising Food: Agrarian Questions and Global Restructuring*. New York: Routledge: 287-304.
- Wickson, F., Carew, A.L., and Russell, A.W. (2006), "Transdisciplinary research: characteristics, quandaries and quality," *Futures*, 38: 1046-1059.
- Xu, L.-s. (2000), "Strategic competence for intercultural communication," *Journal of Zhejiang University*, 1 (4): 476-480.
- Zoreda, M.L. (1997), "Cross-cultural relations and pedagogy," *American Behavioral Scientist*, 40 (7): 923-935.

Jane Palmer, PhD, is an honorary associate and Senior Research Consultant at the Institute for Sustainable Futures, University of Technology Sydney, and works part-time as a researcher at the University of the Sunshine Coast. Her transdisciplinary doctoral research focused on life story ethnography as a source of understanding social-ecological systems, and she has co-authored a book and journal papers on climate change adaptation in the rental housing sector. Her research interests include ethnographic methods in sustainability research, ethical issues in fieldwork, futures methodologies, and theories and methodologies of transdisciplinary research.

Assoc. Prof. Jennifer Carter is Geography Discipline Leader at the University of the Sunshine Coast and specialises in development, Indigenous and environmental geographies. She leads a range of teaching and research initiatives including program and curriculum development and delivery in geography in higher education, research into the teaching of Indigenous Studies, and the B.A. (Honours) and the B.Social Science (Honours) programs. She is a member of the Institute of Australian Geographers and the Australian Institute of Aboriginal and Torres Strait Islander Studies, the Geography Teachers Association of Queensland, and is on the Referee Advisory Board of the *Review of International Geographical Education Online*.