Place and Transdisciplinarity

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Abstract

This paper tendered a brief exploration of the synergy between place studies and transdisciplinarity. After describing the main tenets of transdisciplinarity and of place studies, a discussion teased out eight lines of synergy between the two approaches, each striving to ensure voices and perspectives are heard from different places during the solving of complex human problems. Both approaches strive to integrate many levels of truth while generating new knowledge or engaging in place-learning, place-making, even world-making. Place-conscious transdisciplinarians can be sensitive to insights gained from respecting the role of place in solving the problems of the world. They can scaffold TD ontology, logic, epistemology and axiology with dimensions and dynamics of place.

Keywords: transdisciplinarity, place studies, complex problems, place

1. Introduction

Somerville, et al.\(^1\) observed that “place studies has recently emerged as a significant transdisciplinary field.” Already familiar with transdisciplinarity (TD), this was my first introduction to a link between place studies and TD. The more I read, the more it became obvious that Somerville et al.\(^2\) were onto something quite interesting. I was further intrigued to read Lipsanen’s\(^3\) comment that place is an ontological category, that it has a fundamental place in ontology (reality). Transdisciplinarity, as a methodology, also is deeply concerned with ontology, as well as epistemology (knowledge) and logic\(^4\), and some\(^5\) say axiology (values). This paper tenders a brief exploration of the synergy between place studies and transdisciplinarity, especially in relation to Nicolescu’s\(^6\) notions of ontology, multiple Levels of Reality and the Hidden Third, and the Logic of the Included Middle as they inform the creation of complex, emergent TD knowledge (epistemology).

\(^1\) Somerville et al., 2011, p.1
\(^2\) Ibid.
\(^3\) Lipsanen, 2001
\(^4\) Nicolescu, 2010
\(^5\) McGregor, 2011c
\(^6\) Nicolescu, 2010
2. Transdisciplinary Ontology and Logic

Nicolescu\(^7\) posited three pillars of transdisciplinarity. Epistemology is understood to be complex, emergent knowledge. Reality (ontology) is presumed to comprise multiple Levels of Reality (perspectives and world views) mediated by the Hidden Third. The logic of inferences is called the Logic of the Included Middle, the fertile middle ground or space among disciplines and between the academy and civil society. His approach to transdisciplinarity is based on quantum physics, chaos theory and living systems theory, as well as other new sciences, new relative to Newtonian physics and aligned classic sciences.\(^8\)

Nicolescu\(^9\) proposed it is essential to seek multiple perspectives on any human problem (or set of human problems) because the intent is to integrate many levels of truth while generating new TD knowledge. Succinctly, TD ontology respects the complex and dynamic relationships among at least 10 different realities organized along three Levels of Reality (see Figure 1): (a) the internal world of humans, where consciousness flows – the TD-Subject (comprising political, social, historical, and individual realities); (b) the external world of humans where information flows – the TD-Object (comprising environmental, economic, and cosmic/planetary realities); and (c) the Hidden Third. Peoples’ experiences, interpretations, descriptions, stories, representations, images, and formulas meet on this third level. Three realities exist in this intuitive zone of non-resistance, this mediated interface: culture and art, religions, and spiritualities. Together, the three overarching Levels of Reality form TD ontology.

Each of the 10 realities along the three levels is characterized by its incompleteness; yet, together, in unity, these realities generate new, infinite knowledge. TD ontology deals with the mediated flow of inner consciousness (perceptions) and technical information from different stakeholders’ realities leading to a meeting of the minds in a zone of non-resistance (the Hidden Third). In this zone, people shed their resistance to truth informed by other stakeholders’ realities and join these realities to generate complex TD knowledge. The Hidden Third connects all levels of reality. This zone of non-resistance allows for the unification of different realities (perceptions and notions of truth) while preserving their differences.\(^10\)

In more detail, Nicolescu\(^11\) proposed the Hidden Third mediates the flow of information with the simultaneous flow of consciousness such that divergent minds can connect and share information and perspectives so as to solve complex, emergent problems. Problem solvers have a means to integrate perspectives from different realities (e.g., economics with environmental), as well as to integrate consciousness and perceptions with information, while maintaining their differences. The resultant emergence of a temporary new T state (see Figure 2, used with permission\(^12\)) represents the emergence of new insights and perceptions, made possible because of the temporary reconciliation of any contradictions or antagonism amongst various points of view (Levels of Realities) held by actors in the place. The results are the generation of emergent, integrated and integral TD knowledge about a complex, wicked problem (TD epistemology).\(^13\)

The passage from one level of reality to another is ensured with the Logic of the Included Middle, which replaces the logic of exclusion espoused by the old sciences.\(^14\) Newtonian logic assumes that the

\(^{7}\) Nicolescu, 2010
\(^{8}\) McGregor, 2011b
\(^{9}\) Nicolescu, 2010
\(^{10}\) Ibid.
\(^{11}\) Nicolescu, 2011
\(^{12}\) Nicolescu, 2008
\(^{13}\) McGregor, 2011b
\(^{14}\) Nicolescu, 2010
Figure 1. Multiple levels of Reality.

Figure 2. The Hidden Third.
space (the place) between things is empty, flat and static; hence, people presume it is very difficult, if not impossible, to interface between disparate disciplines, the private and public sectors, and civil society. The TD Logic of the Included Middle is very powerful. This inclusive logic enables people to imagine that the space between things (especially between disciplines, different realities, and the academy and civil society) is alive, dynamic, in flux, moving and perpetually changing. It is in this place that everything happens.

Transdisciplinarity has people stepping through the zone of non-resistance (the Hidden Third) onto the fertile, moving floor of the included middle, where they generate new transdisciplinary intelligence and knowledge, together. When the separate bits of knowing and perspectives, and the people who carry them, came together to dance in the fertile transdisciplinary middle space, they move faster when they are exposed to each other than when they are alone, creating intellectual fusion. The result is emergent, complex transdisciplinary knowledge (TD epistemology) that can be used to solve the pressing problems of humanity. The next section provides an overview of the concept of place, followed with an exploration of the synergy between place and transdisciplinarity.

3. The Concept of Place

The notions of space and place seem to be quite central to transdisciplinarity; hence, this paper’s exploration of the possible synergy between place studies and trandisciplinarity. The concept of place also is central to the disciplines of geography, architecture (landscapes), literary and media theory, and environmental psychology, to name the most common disciplines. Place studies, a subset of cultural studies, is a new transdisciplinary formation that focuses on new understandings of place, augmenting earlier work tendered between 1950 and 1970. Places are filled with individual identities, languages, cultural reference points, societal rules, objects, non-human others and such, whether real or virtual. Place studies focuses on our relationship to place, paying special attention to how place affects knowledge making. Gruenewald posited that places, as centers of experience, teach people about how their world works, and how their lives fit into the spaces they occupy. He further presumed that “places make us.” Especially, place shapes possibilities.

Place is more than geography. It is a cerebral and emotional blend of associations, and awareness that is part physical, part science, and part history, culture and social memory. Place is subjective and very personal. Place is powerful because it reveals, as well as shapes, values and identity. Somerville referred to “the enigma and challenge of place,” by which she meant the puzzling nature of place that baffles our understanding, and the demanding task we face while attempting to understand how people relate to place. She continued, “through place it is possible to understand the embodied effects of the global at the local level.” Place enables people to act on the local from the perspectives and understand-

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15 McGregor, 2009
16 Janz, 2006; Turner and Turner, 2003
17 Somerville et al., 2011
18 Augé, 1995
19 Varnelis and Friedberg, 2007
20 Somerville et al., 2009
21 Gruenewald, 2003a
22 Ibid, p. 647
23 Georgetown University, 2011
24 Somerville, 2010, p. 329
25 Ibid, p. 331
ings of others at the more global level (others’ local places). 26 “Place knowledge” cannot be created unless there is a bridging of different disciplinary perspectives. 27 As a preamble to a discussion of place and transdisciplinarity (all about bridging perspectives), two approaches to conceptualizing the concept of place are examined: dimensions of place and dynamics of place.

4. Dimensions of Place

Gruenewald, 28 in a seminal article, developed a five-dimensional model of place. He posited that each of the five dimensions is both stand-alone and interrelated with the others. The five dimensions are perceptual, sociological, ideological, political and ecological (see Figure 3). He framed these as a collection of ideas for analyzing the “power of place” and for redirecting people’s attention to the power of places where they actually live out their lives. Place studies urges us to “open our senses to the living world of places,” to “examine the impact of place on culture and identity,” to “embrace our political roles as place makers,” and to accept that “place making has become the ultimate human vocation.” 29

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26 Soja, 2000
27 Somerville, 2010, p. 331
28 Gruenewald, 2003a
29 Ibid, p. 636
Drawing on phenomenology (the study of conscious experience and the phenomena that appear during acts of consciousness), Gruenewald\textsuperscript{30} proposed the perceptual dimension of place. Places are not objects or places on a map. Places are alive and have lives. This mind-bending idea pries open a space to conceive of humans as being in relation with their world. Just as people are connected to places, places have cultural and ecological lives and one place is connected to other places. People’s ability to perceive places in this manner has been blunted by society’s isolation of people from ecosystems, viewing the latter as a resource to be exploited and used for human needs and wants. We need, instead, to view place as a complex of ecosystems and cultures by which humankind has evolved.

Second, predicated on the notion that place holds our culture and our identity, Gruenewald\textsuperscript{31} tendered the sociological dimension of place. Humans construct places as expressions of their culture (akin to what he called “social landscapes”); that is, “places are social constructions.”\textsuperscript{32} Such places include schools, communities, workplaces, faith institutions, and governments. These places produce and reinforce particular ways of thinking about and being in the world. Consequently, selfhood (social and cultural identity) and placehood (social landscapes) are completely intertwined. Place roots people in their culture. It shapes their place stories and these stories shape the place. Human beings are responsible for place-making, even place-destruction (e.g., destroying the Earth and other species for their own ends).

Third, Gruenewald proposed an ideological dimension of place. Ideologies are a set of beliefs that characterize a social group. Ideologies are the ruling ideas of the time, and prescribe the preferred way to live our lives. They come with assumptions about what is worthy of belief and attention, what is accepted as true, and what is valued. The prevailing ideologies shaping contemporary society are neoliberalism, capitalism, consumerism, political conservatism, and patriarchy.\textsuperscript{33} Gruenewald\textsuperscript{34} posited that place “is alive, pulsing with beliefs, thoughts, and actions that shape who we are as people.” Ideologies are often unexamined, leading to what Gruenewald\textsuperscript{35} described as “often-unconscious experience of places.” He continued, asserting that places are always inscribed with politics and ideologies, and these simultaneously reflect and reproduce social relationships of power and domination. Excessive power can lead to marginalization and displacement.

Hand-in-hand with the ideological dimension of place is the political dimension. Because place studies is a sub-field of cultural studies, it focuses on each of the politics inherent in the distribution of power and the politics of identity and differences. Power distributions and differences create spaces that can lead to “a life on the edge,”\textsuperscript{36} to marginalization and oppression caused by cultural imperialism and violence. This situation screams for resistance to the hegemony, the dominance of social groups or the state over others. Those exercising hegemony live in the center places of society, at the core of political power. The resultant push back from the margins involves the creation of places of resistance, agency and solidarity.

Finally, Gruenewald tendered the idea of an ecological dimension of place. He referred to “an ecological consciousness of places” as he explained humans’ lack of perception of their non-human worlds.\textsuperscript{37} He called for people to align their cultural practices (e.g., production and consumption) with the ecological limits and features of places. Those concerned with the ecological dimension of place would give

\textsuperscript{30} Ibid
\textsuperscript{31} Ibid
\textsuperscript{32} Ibid, p. 626
\textsuperscript{33} McGregor et al., 2008
\textsuperscript{34} Gruenewald, 2003a, p. 628
\textsuperscript{35} Ibid, p. 629
\textsuperscript{36} Ibid, p. 633
\textsuperscript{37} Ibid.
prominence to the relationship between the exploitation of people and of their environments, of their places. This foregrounding of the person-place ecological relationship is necessary because “places are the experiential center of patterns of both social and environmental domination.”

Not only can people be exploited, but so can places containing ecosystems and species other than human. An “intense consciousness of places” can lead to ecological understandings, and deepened empathetic connections to places.

5. Dynamics of Place

Somerville has developed a pedagogy of place based on feminist post-structural and postcolonial theorizing. Her work, and that of her colleagues at Monash University in Australia, emerged out of many years of collaborative research with Australian Indigenous peoples. Although this paper is not about pedagogy nor a particular cultural collective, her three-pronged approach to place provides insights into dynamic transdisciplinary problem solving because of place studies’ focus on intellectual and emotional borderwork involved when Western academic thought (the academy) meets subjugated knowledges and other ways of knowing outside the academy. She juxtaposed each of story, body and zone of contact to create a conceptual framework for a place pedagogy (see Figure 4), called dynamics of place in this paper.

Figure 4. Dynamics of place (extrapolated from Somerville's 2010 Place Pedagogy).

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38 Ibid, p. 635
39 Gruenewald, 2003b, p. 8
40 Somerville, 2010, Somerville et al., 2009, Somerville et al., 2011
First, she posited that people’s relationship to place is communicated in stories, with stories understood to be basic units of meaning making. Stories ascribe meaning to places, at the same time that they shape places. If people want to change how they relate to place, they have to change their stories about place. This change cannot happen unless they remain open to other people’s place stories. Together, they become “responsible for place making” because they have “become conscious of themselves as place makers.”  

She believed it is possible to co-create alternative storylines that have the power to replace the old stories, opening the door for creative problem solving. Indeed, “extending the concept of story this way enables the possibility of different ways of knowing places to come into conversation with each other.”

Second, she proposed that place learning begins in the body; place is necessarily embodied and local. Arguing that modern day, objective science has distanced people from being able to recognize that they are connected to place, Somerville et al. invited us to rethink place relative to our bodies. They recommended placing our bodies at the center of place, asserting that place-learning derives from a deep, embodied sense of connection. Part of this place-learning entails paying special attention to the landscape, the locale (hence, the notion that place is embodied and local). Somerville et al. explained that landscapes and country are living entities, with a yesterday, today and tomorrow. Being conscious of the positioning of the body in relation to ‘the country’ or landscape (a form of non-human-other, material terrain) enables us to conceive of the local country or landscape as being deeply enfolded into our bodies, memories and imaginations. Somerville referred to “the body-in-place at any particular moment” and suggested that the body, a “meta-category,” can identify absences in dominant storylines and help to construct new stories of place.

The third dynamic of place is a contact zone of cultural contestation. The basic premise of the zone of contact is that place provides a site of intersection of multiple and contested place stories, a space for telling and listening to a multiplicity of different stories about the same place (embodied life experiences). The function of this contact zone is to preserve differences while remaining willing to suspend meaning. This dynamic opens the way to possibilities for deep engagement across the differences and for transformation in the future.

Somerville et al. explained that each person brings his or her story to the contact zone, to the present. Each person and his or her story has trajectories to the past. A meeting of the past and the present in the zone of differences opens towards the future. Moving back and forth within, between and across the mobile and shifting boundaries in the “zone of discomfort” involves “continuing engagement with difficult questions, moving beyond a personal comfort zone to refuse easy answers and often to dwell in a space of unknowing.” The in-between space of the contact zone, “a fraught political terrain,” is a space of transformative potential where new possibilities lie.

41 Somerville, 2010, p. 336
42 Somerville, 2010
43 Somerville et al., 2011, p. 4
44 Somerville et al., 2009
45 Somerville et al., 2011
46 Somerville, 2010, p. 337
47 Somerville, 2010
48 Somerville et al., 2011
49 Somerville, 2010, p. 338
50 Somerville et al., 2011, p. 6
51 Ibid.
6. Relating Place to Transdisciplinarity

Varnelis and Friedberg\(^\text{52}\) proposed that place is in a process of deep transformation. This paper builds on that momentum and brings the concept of place to bear on transdisciplinary problem solving, mainly because Somerville et al.\(^\text{53}\) viewed place as being able to generate conversations across disciplinary boundaries. Transdisciplinarity’s main focus is to solve the problems of the world through transcending the boundaries within the disciplines and between the academy and civil society.\(^\text{54}\) This intent is akin to place studies’ concept of world-making tendered by Somerville et al.\(^\text{55}\) Making new worlds requires openness to new directions and possibilities emergent from the specificity of particular places. It involves engagement with the other, understood to include humans, more-than-humans (other species), and the earth. When world-making, the people involved anticipate the eruption of the new, which requires a space for construction and negotiation of meanings as well as a space of relationality (things ‘take place’ as they unfold).

Those embracing transdisciplinarity can enrich their understandings of the complex solving of wicked world problems by drawing on the insights of place studies. Wicked problems, such as climate change, health pandemics or water resource management, are viewed as ill-structured social issues that have human and social interactions at their centre. Each stakeholder has radically different views and understandings of the problem and of what constitutes a viable solution. Within the immense space for options, those impacted by the problem have to negotiate and collectively exercise judgement while juggling conflicting interests and priorities.\(^\text{56}\)

During the process of solving complex human problems (i.e., making new worlds), many personalities and world views will come into contact. Each person at the table comes with his or her own stories of the place under contestation (i.e., the wicked problem). Place studies takes up the complexity of contested place stories.\(^\text{57}\) Place studies presumes that “syncretic beliefs about places are possible”.\(^\text{58}\) By this, Scully meant it is feasible to combine different schools of thought and beliefs, striving for underlying unity through diversity. Transdisciplinarity strives for the same thing. Other examples now are shared of the exciting synergy between (a) the dimensions of place,\(^\text{59}\) (b) the dynamics of place,\(^\text{60}\) and (c) transdisciplinary axioms or pillars. Several similar and/or parallel concepts thread their way through each approach.

First, each approach references zones, with transdisciplinarity focused on zones of non-resistance while place studies is focused on contact zones of cultural contestation. The intent of both is to find a way for diverse peoples to talk with each other while maintaining their differences. Place studies’ focus on respecting contestation, and TD’s concern for a place of non-resistance to other’s worldviews and perspectives, strongly complement each other. Place can be a meeting ground for these diverse perspectives and the ensuing TD problem solving can be place-responsive (see Gruenewald and Smith).\(^\text{61}\)
Second, both are interested in the interplay between different disciplinary perspectives, exemplified in Gruenewald’s\(^\text{62}\) five dimensions of place and Nicolescu’s\(^\text{63}\) 10 different realities (many with disciplinary origins) organized around three overarching levels of reality. Together, they encompass political, social, historical, economic and environmental disciplinary orientations as well as ideology, perceptual (consciousness), spiritual, religious and cultural dimensions. The synergy between the two approaches is obvious. Both approaches are concerned with ensuring that differences are maintained while people strive to weave these diverse dimensions and perspectives together to problem solve.

Third, because place is a concept that operates at the crossroads of current social, political, economic and environmental issues, places are locations imbued with human values. Place reveals and shapes values.\(^\text{64}\) Transdisciplinarity work is back dropped by values, which play a key role during complex problem solving. Attention to value premises in places where people are problem solving enhances people’s ability to determine the deep, underlying causes of the world’s crises, to understand these crises and, most significantly, to overcome them.\(^\text{65}\)

Fourth, place studies assumes that if people want to change how they relate to place, they have to change their stories about place. This change cannot happen unless they remain open to other people’s place stories.\(^\text{66}\) To reiterate, place is not just a geographic location. It also is a cerebral and emotional blend of associations and awareness. Transdisciplinarity strives for opportunities to hear as many versions of the truth as possible from diverse voices. Those truths are often shared through narratives, discourses, dialogues and conversations, and TD would hold they are shared in the Hidden Third space. Truth-sharing is not an easy task. Remaining open to many perspectives and diverse voices, expressed through lived experiences with a place and its attendant pressing issues, is the intent of both place studies and transdisciplinarity.

Fifth, Somerville et al.\(^\text{67}\) recommended placing our bodies at the center of place, asserting that place-learning derives from a deep, embodied sense of connection. Transdisciplinarity urges people to embrace the idea that complex, emergent TD knowledge is generated in the fertile middle space, that place among disciplines and between academic disciplines and civil society. In this space, when divergent bodies interface and interact, fusion occurs through the place connections. Both place studies and transdisciplinarity are concerned with the synergy generated when deep learning and sharing (world making) happens in a shared place of knowledge creation. Being conscious of the positioning of the body in relation to place enables us to conceive of the place as being deeply enfolded into our bodies, memories and imaginations. TD also assumes that knowledge is embodied, becoming part of everyone during the knowledge creation process in the middle ground.

Sixth, place studies conceives the in-between, contentious cultural contact zone as a place of transformation where possibilities lie. This place is described as a zone of discomfort because people who hold different experiences of the same place have to try to talk and listen to each other. Place studies presumes this zone is replete with possibilities for deep engagement across differences leading to alternative place stories and futures.\(^\text{68}\) Transdisciplinarity ontology draws on a very similar concept called the quantum vacuum. As does place studies, transdisciplinarity also assumes that this space is not empty, but is full of potential. It contains fleeting electromagnetic waves and particles that pop into and out of

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\(^{62}\)Gruenewald, 2003a

\(^{63}\)Nicolescu, 2010

\(^{64}\)Mayhew, 1977; Ngongkum, 2008

\(^{65}\)McGregor, 2011c

\(^{66}\)Somerville, 2010

\(^{67}\)Somerville et al., 2009

\(^{68}\)Somerville, 2010
existence, just like insights, hard lessons and growth emerge and retrench during complex problem solving. When applied to human problem solving, transdisciplinarity assumes that, as people cross through, and temporarily live within, this vacuum (place) full of potential, TD knowledge is generated, mediated by the dynamics of the Hidden Third.\textsuperscript{69} Both place studies and transdisciplinarity are concerned with accommodating the tensions that emerge when differences collide, anticipating transformation and world-making if the process is properly respected and mediated.

Finally, both place studies and transdisciplinary are deeply concerned with accommodating the border work that occurs as people cross within, between and beyond place boundaries. Place studies envisions border work to involve human interactions that occur during story telling and listening at the mobile and shifting boundaries of the zone of discomfort.\textsuperscript{70} Transdisciplinarity posits that intellectual border work unfolds as people living and working on the borders of the academy (university disciplines) and civil society engage in complex problem solving after passing through the zone of non-resistance. Through a lengthy and complex process, academe knowledge and action-relevant, local, place-oriented knowledge are integrated. This integration further entails transborder value work. The requisite knowledge integration (place knowledge)\textsuperscript{71} cannot occur unless values, and their contentious role in problem solving, are duly accounted for during border work.\textsuperscript{72}

7. Conclusion

Place is a construct of growing interest outside education\textsuperscript{73} and other disciplines. This paper tendered the idea that the concept of place has a place within transdisciplinarity. Transdisciplinarians that are place-conscious can become sensitive to the insights to be gained from respecting the role of place in solving the problems of the world. They can scaffold TD ontology, logic, epistemology and axiology with dimensions and dynamics of place. Story, body and zones of contentious cultural contact, informed by politics, ideology, perceptions, ecology and sociology, can be aligned with multiple perspectives (many stories, disciplines and realities), zones of non-resistance for meetings-of-the-minds, embodied knowledge generation in the fertile middle ground (place), and integral value premises. The synergy between these two approaches warrants further consideration as both place studies and transdisciplinarity continue to evolve.

8. References


\textsuperscript{69}McGregor, 2011b
\textsuperscript{70}Somerville, 2010
\textsuperscript{71}Ibid
\textsuperscript{72}McGregor, 2011c
\textsuperscript{73}Gruenewald, 2003a


