Invited Commentary

Transdisciplinary Entrepreneurship and Transdisciplinary Ethics

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This invited commentary for the *Journal of Ethics and Entrepreneurship* examines the idea of transdisciplinary entrepreneurship and ethics. These three concepts are not often connected in the same line of thought. Each of these concepts is rich with interpretations and definitions, but the purpose of this paper is to argue that entrepreneurship informed by a transdisciplinary mindset and by transdisciplinary ethics is a new frontier worthy of exploration. For the purpose of this paper, entrepreneurship is considered to be "the creation of new business enterprises by individuals or small groups, with the entrepreneur assuming the role of society's major agent of change, initiating the industrial progress that leads to wider cultural shifts" (Kent, Sexton, & Vesper, 1982, Abstract). Ethics involves "systematic, critical reflection on human action with the aim of both increasing knowledge about and improving culturally or personally acceptable behavior" (Balsamo & Mitcham, 2010, p. 259).

Transdisciplinarity is Latin for across, beyond, back and forth, transcending university-based disciplines to include other forms of knowledge. It is concerned with making integral connections among diverse actors, ideologies and mindsets to address the complexity of 21st century problems. It is considered to be between the disciplines, across the different disciplines, and beyond all disciplines (Nicolescu, 2008). "It's no mystery. What is beyond any discipline? It is, of course, ourselves, the human being" (Nicolescu, 2007, p. 78). Transdisciplinary work transcends the academy (disciplines at universities) and includes civil society and other sectors, especially business enterprises. It is an approach focused on addressing the complex, problematic situations facing humanity that cannot be solved from just one sectoral perspective (McGregor, 2015).

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Ethically, transdisciplinarity is about dialogue and engagement across ideologies, scientific, religious, economic, political and philosophical lines" (Shrivastava & Ivanaj, 2011, p. 85). No one perspective, discipline, sector, or world view constitutes a privileged place from which to understand the world (Nicolescu, 2010, 2014). The latter assertion means entrepreneurs would have an opportunity to understand the world and how to solve humanity's messy problems from viewpoints beyond their commercial ideology and enterprise.

Transdisciplinary Entrepreneurship

Bringing transdisciplinarity to entrepreneurship is a new strand of thinking. A June 2015 Google and Google Scholar search using the term transdisciplinary entrepreneurship yielded only 18 results, most dated within the last five years (see Beekman & Dagevos, 2013; Mercador, 2011; Palaiologou, 2012). But, if transdisciplinary refers to the interface of disciplines with the rest of the world (including businesses) to solve society's major issues, and entrepreneurship means creating a new business while acting as a social change agent, then it makes sense to conceptually and pragmatically connect transdisciplinarity to entrepreneurship. Indeed, Mercador (2011) claimed entrepreneurship is informed by a transdisciplinary mindset.

Beekman and Dagevos (2013) further argued that responsible innovation within entrepreneurial enterprises requires transdisciplinarity. In our very complex, interconnected world, "enterprise managers and employees need to find deeper meaning in their work" (Shrivastava & Ivanaj, 2011, p. 86). By deeper, they meant "an absolute respect for collective and individual otherness united by our common humanity" (p. 85). Such responsible entrepreneurship entails supporting a transdisciplinary approach (Šinkovec, 2011).

Entrepreneurship and Transdisciplinary Ethics

Mercador (2011) went further and claimed that entrepreneurship is informed by a transdisciplinary mindset that is embedded in ethical behaviour. Transdisciplinarity necessitates an ethical imperative (Max-Neef, 2005). Indeed, transdisciplinarity inherently includes ethics and ethics is a transdisciplinary perspective (Muff et al., 2013). Not surprisingly then, transdisciplinary ethics is also a new innovation (Schlitt, 2007). Considered to be an elevated form of ethics, transdisciplinary ethics is said to focus on three objectives: (a) ensuring that intellectual, virtuous and integrated people and groups are formed who are ready to reveal and confront the ethical dimensions of the messy situation they are jointly facing; (b) creating the capacity for right reflection and just decision making amongst this collection of people; and, (c) arriving at concrete guidelines to help them make appropriate decisions in these complex situations (Schlitt, 2007). Transdisciplinary ethics are not a superior form of ethics; rather, they are attuned to the nuances of divergent people working together

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for the first (any maybe only) time on a pressing issue that cannot be adequately addressed from a lone perspective.

Dincã (2011) claimed that addressing the complexity of the world necessitates transdisciplinary ethics, which are based on the mutual respect of individual and collective diversities. "Transdisciplinary ethics ... transcend any particular discipline or profession [or sector]" (Fisher Thorton, 2011, p. 2). Such ethics try to help people work with a more holistic view of persons and situations as they strive to relate various actors to one another through critical, ethical reflection (Schlitt, 2007).

Mercador (2011) conceptualized transdisciplinary ethics as comprising entrepreneurship, managerial capabilities, and transcultural behaviour. He intimated that entrepreneurial leaders and managers who viewed their situation through transdisciplinary ethics would ask key revealing questions: Am I taking all variables and perspectives into account? Am I solving the complexity of the situation? Mercador proposed that such transdisciplinary ethical behavior would be guided by respect, honesty, responsibility, unity, integrity, and justice. This behavior would be informed by the personal values of courage, service, perseverance, generosity, and creativity. Inside, the entrepreneurial manager would draw on humility, patience, compassion, and due diligence as she or he exercised self-discipline, vision, and self-motivation. These values and virtues would all factor into entrepreneurial, transdisciplinary ethics and attendant dialogue.

Transdisciplinary Dialogue and Ethics

This rich value matrix means that diverse agents working together, including entrepreneurs, would have to learn to consider ethics in a new way. They would have to "let go of the script" that confines them to their familiar way of knowing and seeing the situation (Austin, Park, & Goble, 2008, p.562). To that end, transdisciplinary ethics would involve overcoming any traditional, familiar, and possibly restraining ethical perspectives and opening oneself up to others' perspectives (Giri, 2002; McGregor, 2015).

In more detail, conversation is the means by which ethics and knowledge are acknowledged, shared and discovered during transdisciplinary work, and this conversation would entail letting go of one's script and engaging in authentic dialogue and ethical reflection. In fact, transdisciplinary ethics is a form of relational ethics in that it emerges and is affirmed during continual conversations (Austin et al., 2008). Relational ethics assumes that acting ethically demands attentiveness and responsiveness to commitments to others so people can find fitting responses to ethical questions. A fitting response would be deemed suitable by all and would take into account the immediacy and the complexity of the situation and the relationships among diverse actors. The answer to 'What action should be taken?' is discovered in dialogue (Austin, 2008).

In the spirit of this dialogue, transdisciplinary enterprises would encompass ethics involving the discovery of bridges between different areas of knowledge and different beings (Palaiologou, 2012). Conversely, because ethics bridges knowing, doing and being, it constitutes sites of transdisciplinary engagements (Balsamo & Mitcham, 2010). Transdisciplinary work would lead to new understandings enabled by the generation of new, co-developed language, concepts, and the logic of genuine dialogue. Transdisciplinarity inherently entails ethical challenges that would be overcome through long-term dialogue. This dialogue would be required if the long-standing boundaries between the various actors ever hoped to be blurred, crossed or taken down; that is, transcended. Indeed, ethical thoughtfulness would need to be in place to respect any actor's insecurities and perceptions of loss of agency during transdisciplinary work (Palaiologou, 2012).

In this dialogue, transdisciplinary groups (which would include entrepreneurs) engage in deep grappling with situations instead of applying principles in a general rule-of-thumb fashion (Wilson, 2014). This is not to say that transdisciplinary dialogue is not grounded in principles; rather, it means those involved would access the situation at hand and determine if existing principles are appropriate or if new ones are required. They would learn to move beyond the relative simplicity of 'just solving the problem' and get into the midst of grappling with new challenges. Grappling means coming to terms with something in the face of deep complexity and contradictions. This is necessary because people are engaging in novel moral and ethical decisions that require creativity amongst diverse actors who do not normally work together (Wilson, 2014).

Also, transdisciplinary ethics are "constituted by transdisciplinary questions" (Balsamo & Mitcham, 2010, p. 259). Transdisciplinary questions evolve around how to understand the world and all of its complexities; people cannot understand the world unless they connect subjective humans with objective science and ways of knowing the world (Nicolescu, 2007). In this process, ethics would manifest strong transdisciplinary elements in that ethics are heavily dependent on life experiences, and because they are implicated in the creation of new hybrid ideas (Balsamo & Mitcham, 2010).

Transdisciplinary Knowledge and Logic

Indeed, through dialogue, new transdisciplinary knowledge is created. Nicolescu (2008) called this embodied, emergent, complex, and cross-fertilized knowledge (see McGregor, 2015). Transdisciplinary knowledge production is socially, historically, culturally, and materially situated; it is knowledge created in context (Klein et al., 2001). This does not refer to relativism but to the fact that problem posing and solving, and attendant knowledge creation, happen in the arena where the problems are being experienced and the solutions (if there

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are any) will be implemented; that is, in context rather than removed from reality. As a new way for creating knowledge, transdisciplinarity has to manage, redistribute and share the new intellectual spaces that are opened up with the emergence of new opportunities and relationships (Fotea, Pop, Vaduva, & Fotea, 2012). The transdisciplinary "knowledge search window… puts together things, people, and events that are distant and only partially congruent, because [this window for new knowledge] allows the existence of old and new… [using] a synergistic generative [integrative] perspective [and process]" (Fotea et al., 2012, p. 1, emphasis added).

Nicolescu (2008) confirmed "that which appears to be contradictory is perceived as noncontradictory" (p. 7). "Opposing aspects of a phenomenon that are generally considered independent can thus be understood as being in dynamic relationship" (Brenner, 2005, p. 3). Nicolescu (2008) proposed that this temporary joining of incongruent ideas is facilitated through inclusive logic, which contrasts with exclusive logic. The latter does not allow for incompatible ideas to come together. Transdisciplinary entrepreneurship would need inclusive logic, which allows temporary states of agreement to emerge when dealing with pressing, urgent and problematic situations that are viewed differently by different actors (see also Palmer, Smith, Willets, & Mitchell, 2009). Transdisciplinarity is needed (a) when humans interact with natural systems (agriculture, forestry, industry, and megacities); (b) in fields of major technical development (nuclear and-biotechnology, genetics); and, (c) where social, technical and economic development interacts with elements of values and culture (aging, energy, housing, health care, waste management, land, food, water) (Häberli et al., 2001).

Transdisciplinary Social Intelligence

As well, transdisciplinary entrepreneurship would entail respecting social intelligence (i.e., knowledge from community and other actors) as a valuable source of knowledge, both in the formulation of questions and their answers. From a transdisciplinary perspective, entrepreneurial innovations and social actions would be undertaken without predetermined, limiting boundaries; a space would be made that validates social intelligence gained from actors other than being limited to business and industry agents (see Klein et al., 2001). This boundaryless interaction would require cooperation, collaboration, respectful dialogue and listening amongst an array of people with diverse expertise and experiences, including entrepreneurial enterprises (Austin et al., 2008; Beekman & Dagevos, 2013). This process would require trust and respect so that those involved can consider and challenge different views (including different ethics), and so that "the unsaid voice can be heard" (Austin et al., 2008, p. 562).

Transdisciplinary Reality

Like others, transdisciplinary entrepreneurs would learn to recognize their ideological screens or lenses that shape their views of situations and the world (Giri, 2002). If entrepreneurs were to become part of a group of diverse actors trying to address a complex social problem (e.g., local poverty, lack of opportunities, inequality, neighbourhood violence), they would have to become open to developing a more world-centric view, one that seeks solutions that are not only economically profitable but also socially just, and ecologically restorative. Embracing a world-centric view expands people's moral and ethical focus and includes caring about the world, not just the bottom line. People would enter "an expanded circle of compassion and sense of social justice, and [develop] a creative ability to see further and make more connections between the various levels of reality in the world" (Palmer et al., 2009, p. 75; see also Nicolescu, 2008, 2010). Reality is a nexus of interrelated phenomena that are not reducible to a single dimension (Klein et al., 2001; Nicolescu, 2008). Through transdisciplinary learning and collaboration, people create new realities (Fotea et al., 2012; McGregor, 2015; Nicolescu, 2008, 2010).

People's perceptions of reality are based on norms (standards), values, and worldviews, each of which predispose them to notice only certain parts of a situation, entertain only certain facts, both leading to narrow reality judgments and inadequate solutions (Vickers, 1972). Entrepreneurs would be no exception. When divergent actors are engaged in mutually addressing a complex problem, some transformations are necessary, including changes in mind set (world view) and changes in moral and ethical frameworks (see McGregor, 2014). These transformations would ease the way to arriving at a set of accommodations that are sufficiently acceptable, culturally and politically feasible, and systemically desirable (by everyone involved) (Checkland, 2000; Palmer et al., 2009).

Conclusion

In conclusion, the main takeaway is that transdisciplinarity, like entrepreneurship, is an active, ongoing process, occurring either intentionally, spontaneously, or serendipitously. This dynamic and inclusive process enables people to question, integrate, reconfigure, adapt or reject information, new knowledge, and new meanings (Fotea et al., 2012). Because entrepreneurs are engaged in continual learning in an interconnected constellation of different actors (Fotea et al., 2012), it makes sense to suggest that entrepreneurship is transdisciplinary and that it should be informed by transdisciplinary ethics. Entrepreneurship informed by a transdisciplinary mindset and by transdisciplinary ethics is a new frontier worthy of exploration.

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