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Mixing methods as a process towards indigenous methodologies

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This discussion proposes an expansion of indigenous research to reflect some of the distinctive epistemological aspects of indigenous ways of knowing. Arguing that indigenous research methodologies can and should go beyond the current hermeneutic borders of conventional qualitative research to embrace more appropriate epistemological and axiological assumptions, it suggests a mixed methods approach as a vehicle for doing so. The contention here is that, by combining current qualitative research practices with the specific aspirations of indigenous communities in a mixed method strategy, it may be possible to build appropriate theoretical tools and ethical practices for indigenous research. Furthermore, this mixed method strategy is framed within the cultural–historic activity theory principles of expansive learning so that the incremental development of practical, philosophical and value-appropriate indigenous research methods is driven by the change-seeking activity generated by contradictory dimensions of western and indigenous research ideals.

Keywords: indigenous research; mixed methods; cultural-historical activity theory; expansive learning; reflective methods; decolonising research

Introduction

While the epistemological and ontological disputes that tend to dichotomise quantitative and qualitative research approaches within the social sciences may not have been resolved (Bryman, 2008), '(t)here can be little doubt that research which involves the integration of quantitative and qualitative research has become increasingly common in recent years'(Bryman, 2006a, p. 97). Referred to, amongst others, as mixed methods or mixed methodologies, this research strategy which deliberately combines elements from quantitative and qualitative approaches to data collection and analysis, and attempts to minimise the differences in epistemological assumptions, research cultures and researcher biographies (Brannen, 2005), is widely regarded as a third approach. Without underestimating the epistemological implications of doing so (Bryman, 2006b), researchers use this approach to pragmatically synchronise a diversity of research processes within one study. Like Cronin, Alexander, Fielding, Moran-Ellis, and Thomas (2008, p. 583), this article understands mixing methods as entailing a comprehensive integration 'as a process which creates, and analytically exploits, a particular relationship between different sets of data'. Elsewhere (Alexander, Thomas, Cronin, Fielding, & Moran-Ellis, 2008, pp. 127–128), these authors point to the array of concerns that occupy researchers in the field of mixed methods, although it is

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Greene, Caracelli, and Graham's (1989) purposes for mixed methods, as summarised in Table 1 of this article, that forms the basis for the later discussion. It should be said, however, that this article will not concern itself with the usual qualitative–quantitative division as such, but hopes to draw from the interaction between these divergent philosophical orientations to propose another mixture of methods and methodologies,[1] namely, that of what are referred to here as conventional qualitative research and indigenous research. The purpose behind such a mixture of methods would be to draw on the interaction of these methods to clarify the relationship between western research and indigenous ways of knowing so that more appropriate theories, practices and relations can be developed for their interrelation. The intention of mixing methods, then, is to both decolonise the areas of collaboration between indigenous and western modes of qualitative research, and rewrite and re-right (Tuhiwai Smith, 1999) the boundaries between these ways of knowing.

Different ways of knowing

By conventional qualitative methods, it is intended those data collection processes, and the epistemological assumptions behind them, which are generally associated with constructivist meaning-making research approaches and their typically inductive logic of enquiry. 'Qualitative research involves the studied use and collection of a variety of empirical materials – case study; personal experience; introspection; life story; interview; artifacts; cultural texts and productions; observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives' (Denzin & Lincoln, 2005, p. 3). By contrast, indigenous research as envisioned here is concerned with the ethically and culturally appropriate study of indigenous people. It differs from conventional qualitative research in that an indigenous epistemology 'acknowledges the interconnectedness of physical, mental, emotional, and spiritual aspects of individuals with all living things and with the earth, the star world, and the universe' (Lavallée, 2009, p. 23). Its methodology is not theoretically constructed but conforms to indigenous ethical protocols that shape the methods according to local cultural imperatives (Porsanger, 2004). The indigenous knowledges which form the basis of this inquiry are understood in terms of Dei, Hall, and Rosenberg's (2000, p. 6) definition of them as 'a body of knowledge associated with the long-term occupancy of a certain place. This knowledge refers to traditional norms and social values, as well as to mental constructs that guide, organise, and regulate the people's way of living and making sense of their world'. Furthermore, these indigenous knowledges seek to actively address colonial and postcolonial intrusions (Dei et al., 2006) as they try to re-establish the experiences and ways of knowing that have been silenced by dominant western knowledge communities. Castellano (2000) identifies three sources of aboriginal knowledge which afford a glimpse of what indigenous knowledge production entails:

> *Traditional knowledge* which has been handed down more or less in tact from previous generations …. *Empirical knowledge* is gained through careful observations …. *Revealed knowledge* is acquired through dreams, visions, and intuitions that are understood to be spiritual in origin. (Castellano, 2000, pp. 23–24 [emphasis in original])

Conventional qualitative research has tried to access, understand and represent these indigenous ways of knowing through a variety of creative, participatory and reflexive

methods. Lincoln and González y González (2008), for example, demonstrate some of the methodological strategies through which scholars attempt to engage with decolonising research. Similarly, Gwyther and Possamai-Inesedy (2009) point to the creative ways in which social justice issues are taken up in research. However, they show that pragmatic difficulties of funding and political interests may curb qualitative researchers doing creative or indigenous research. From the perspective of researcher–other collaboration, Jones with Jenkins (2008, p. 479) explains why, despite the best intentions and extensive training and experience, non-indigenous researchers may be limited in their access to indigenous knowledge. Here, she cites the everyday realities of practical experience, family relations and spiritual experiences which make up the unique and differentiating constitution of an indigenous person's knowledge. Thus, the extent to which 'new-paradigm' (Guba & Lincoln, 2005) research practices are appropriate and empowering of indigenous people is limited and therefore needs to be further expanded upon and more deliberately reconfigured in recognition of the fact that indigenous voices in research cannot be enabled by benevolent western practices alone (Jones with Jenkins, 2008). The call for research philosophies and practices born of indigenous people's efforts therefore recognises that, despite its successes, current social science research does not as yet apply ontologically, epistemologically and axiologically appropriate methodologies of indigenous research. Instead, what passes for indigenous research tends to be methods of data collection and analysis conducted and represented by westernised researchers according to modified, but ultimately hegemonic modern western knowledge traditions. This is in line with Morgan (2003, p. 45) who argues that even when western knowledge institutions appear to be accommodating indigenous knowledges they do so on western terms, so that 'rather than Indigenous scholarship being pursued through Indigenous methodologies in higher education institutions, it is still Western methodologies which are perpetuated'.

Mixing a space for indigenous research

The mixed methods project for engaging with indigenous knowledges, as proposed here, tries to actively counteract such 'appropriation, appreciation, accommodation' (Morgan, 2003). It nevertheless believes, along with Denzin and Lincoln (2008, p. x) that 'indigenous scholars can show critical scholars how to ground their methodologies at the local level'. It also responds to Tuhiwai Smith's (2005) identification of qualitative research as a tool most able to take up the struggles of indigenous communities' decolonising project 'to wage the battle of representation … to situate, place, and contextualise; to create spaces for decolonizing … to create spaces for dialogue across difference; to analyse and make sense of complex and shifting experiences, identities and realities' (2005, p. 103).

Figure 1 depicts the overlapping of current and potential research approaches as illustrative of the mixing of methods in research. The possible contents of the shapes labelled 'Conventional qualitative research' and 'Indigenous research' have already been suggested. The shape in dashed lines represents the initial form of indigenous research, while the solid outline shows a potential, expanded indigenous research. This expanded area represents a new set of research practices and philosophies generated by the critical and deliberate efforts of researchers in the areas of qualitative and indigenous research. The increased size of the shape shows more qualitative and indigenous methods in the area of indigenous research, and its solid outline indicates that these methods have a different and clearer relationship to qualitative research. The

diagram thus shows, firstly, that there potentially exists indigenous research which initially consists largely of, or overlaps with, conventional qualitative research. This area of overlap may contain critical theorists (Denzin, Lincoln, & Tuhiwai Smith, 2008) and CAP ethnographers (Richardson & St Pierre, 2005) engaged in decolonising and innovative methods of research with (other) indigenous scholars. Secondly, there is an area of indigenous research which goes beyond that of the conventional qualitative research and which becomes larger, and its extremities further removed from conventional research practices, as indigenous research takes on its own shape and direction. Here reside uniquely indigenous ways of producing and holding knowledge, such as through alternative modes of consciousness, traditional relationships and local practices (Belanger, 2001; Lavallée, 2009). The expansion of these two areas, and thus appropriate indigenous research as a whole, coincides with the eighth moment (Denzin & Lincoln, 2005, p. 3) which 'is concerned with moral discourse, with the development of sacred textualities'. It is where Richardson and St Pierre (2005) may prepare for 'the democracy to come' and Reason (1993) can practice sacred inquiry. Here the participatory consciousness of Heshusius (1994) is given space to flourish into intuitive ways of knowing and to reconstruct the relationship that knowers have to their subjects of enquiry. This is where axiology is fore-grounded, and researchers can re-negotiate 'the role of spirituality in human inquiry' (Guba & Lincoln, 2005, p. 200). And while the nurturing of ethics, spirituality, intuition and relationships may produce creative and socially responsible qualitative research, indigenous researchers can take them further to establish specifically indigenous methodologies, as illustrated by, for example, Bishop's (2005) attempt to develop whanaungatanga as a methodological frame for research that prioritises Maori protocols in knowledge making.

What is important to bear in mind, though, is that the indigenous methods are originally generated largely from within conventional qualitative research, making this area of overlap important for defining the role that westernised qualitative researchers can play, and the practices and boundaries of their collaboration with indigenous communities. It is on this tricky ground (Tuhiwai Smith, 2005) that I wish to locate my research, proceeding from the understanding that, as a westernised researcher, I can contribute to decolonising research by examining the attitudes,

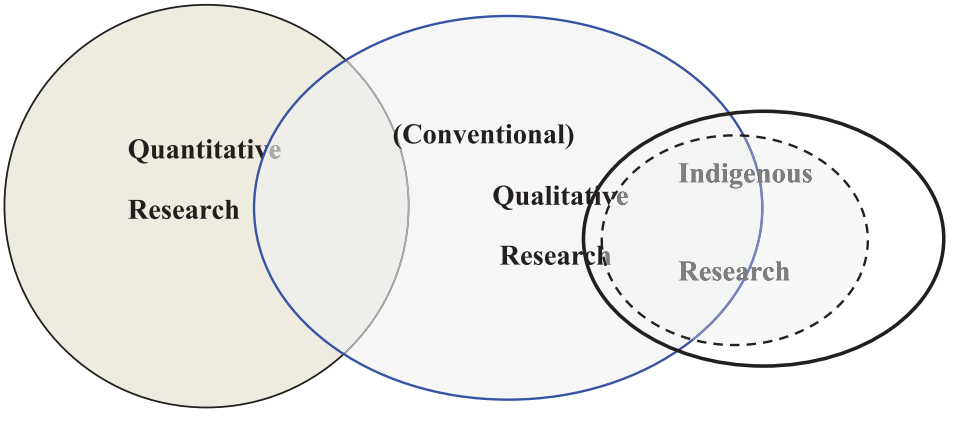

Figure 1. Mixing methods to generate indigenous research methodologies.

practices and philosophies that someone in my position brings to indigene–westerner research encounters. Before outlining an example of how I have used mixed methods in the context of my own research practices, I wish to add that I am not suggesting that indigenous research be regarded as a new paradigm after those of quantitative and qualitative research. However, it should be remembered that although the mixing here starts off on common ground, it is intended for indigenous research to go beyond 'finding an aggregate position or middle ground' (Odora Hoppers, 2002, p. 20) and the shared values and epistemological assumptions that inform current quantitative or qualitative methods.

An example of mixing methods

At this stage, I wish to present a predominantly descriptive account of how mixing methods informed my research, reserving further analysis for later when I have explained the purposes behind the generative process of mixing methods. As mentioned, my research examines westerner–indigene relations within a research context. The first set of methods constitutes traditional ethnographic methods of data collection and analysis consisting of recorded interviews and participant observations. Collected during several months of fieldwork in a rural village in the Eastern Cape of South Africa, the interviews and the analysis targeted indigenous and non-indigenous people from the area with a view of obtaining emic and etic perspectives of indigenous cultural practices and ways of knowing.

The interviews along with the aid of my research diary, photographs and other material became audio and visual cues that formed the basis for an alternative inquiry process. Through them I revisited and reflectively interrogated the practical, cognitive and emotional experiences of my fieldwork, making use of the concept of 'lived experiences', which Van Manen (1990) describes as a pre-reflective consciousness of life that acquires meaning through reflective reliving and representation. The research activities of interviewing, photographing, observing and participating became the phenomenological, unreflected living in the moment – experiences about which I reflected and wrote short passages with the aim of learning about my assumptions and the way in which I had conducted my research. The short passages were often written in an autobiographical style that sometimes emulates autoethnographic texts, as can be noted from the following sample sentences from a piece called 'On leaving':

> As the mild-mannered Xolisa obligingly directs the camera at the cramped occupants, one of the passengers, also a resident of Izolo, starts protesting vehemently in Xhosa. Despite the advantage of years of training I make several assumptions about the reasons for her protests, and despite an enormous effort I fail to suppress my annoyance at her reaction to what seemed a fairly straightforward activity of taking a photograph.

Creating such texts and generating meanings from the process developed into a reflexive method for interrogating my positionality and relating my experiences as a researcher to broader relations within the culture under study (Ellis & Bochner, 2000). I tried to align these reflexive practices with the priorities and aspirations of indigenous methodologies which emphasise ethical and relational aspects of knowledge making. The activity of writing narratives about my collaborations, methodology, thought-provoking incidents, puzzling phenomenon and so on, was in itself a data collecting and analysing process (Richardson & St Pierre, 2005) through which I discovered and

renewed connections, emotions, insights, commitments and perspectives. Searching for ways in which to describe the people and situations I had encountered induced creative and intuitive elements into my understanding (Richardson, 2000), and by making this part of my methods it enabled an extended epistemological access to my research through experiential, propositional, representational and practical ways of knowing (Heron & Reason, 1997, 2001). I believe these elements of creative exploration through intuitive and experiential practice and verbal representation, framed by a decolonising agenda (Bishop, 2005; Tuhiwai Smith, 1999, 2005), help to relate the reflective methods to the development of indigenous methodologies.

Thus, in terms of the mixed method project, the traditional ethnographic methods can be viewed as falling within the area of conventional qualitative research, and the reflective methods as leaning towards indigenous research. The traditional ethnographic methods afford an initial analysis of self–other relations inherent in the research situation, allowing for further analysis from axiological (Guba & Lincoln, 2005) perspectives through reflective ethnographic methods, with the main purpose of integrating methods in this way being the development of more appropriate ways for both non-indigenous qualitative scholars and indigenous researchers to engage in and expand decolonising qualitative research. A further explanation of how this process of combining diverse research methods enhanced my research practices is offered below along with an outline of the purposes for employing this research strategy.

Development, initiation and expansion towards indigenous methods

As Brannen (2005, p. 182) demonstrates, '[a] multi-method strategy should be adopted to serve particular theoretical, methodological and practical purposes'. This is interpreted here as implying, firstly, that a mixed methods approach can be deliberately employed to develop new theories, values and practices that inform indigenous research. Secondly, in pursuing those aims at the grassroots level of focus on daily research practice, a pragmatic approach to the issue of paradigms is required. Most suited for these purposes is Morgan's (2007, p. 53) definition of paradigms as 'shared beliefs within a community of researchers who share consensus about which questions are most meaningful and which procedures are most appropriate for answering those questions'. His definition locates the activity of mixing western and indigenous research methods within communities of practice rather than subject areas, while admitting that these researchers' beliefs and their epistemological stances and worldviews are 'nested within each other' (Morgan, 2007, p. 54). Morgan's pragmatic definition and the metaphysical definition espoused by constructivist qualitative researchers are therefore not mutually exclusive. Consequently, by emphasising the connection of everyday research practices to epistemological and ontological assumptions, the commonly held assumptions are clarified, while the constructivists' warning about the incompatibility of ontological assumptions (Guba & Lincoln, 2005) means that also the borders between indigenous and western philosophical orientations are respected.

Furthermore, Greene et al. (1989, p. 257) point to a middle-ground situationalist position on the issue of mixing which 'retains the paradigmatic integrity stance of the purists but also argues, like the pragmatists, that our understanding of a given inquiry problem can be significantly enhanced by exploring convergences in stories generated from alternate paradigms'. I have already alluded to some of the ways in which researchers have realised this position and now direct attention to one such product, Table 1, which outlines some of the reasons that Greene et al. (1989) have put forward

for combining quantitative and qualitative research. Although Bryman (2006a) elaborated significantly upon the table, this article will mainly be drawing attention to its last three elements of 'development', 'initiation' and 'expansion' as guideline purposes for mixing conventional qualitative research methods with indigenous research methods.

The potential of the *development* purpose of mixing indigenous and conventional qualitative research is clear from Green et al.'s (1989, p. 260) description of it as the sequential mixing of methods 'where the first method is used to help inform the development of the second'. Such development is in line with the previously mentioned manner in which this article envisions indigenous research as originating from already existing research practices and being generated from an interaction of conventional qualitative methods and indigenous research methods.

The development function not only deepened the analysis of the themes identified by the conventional methods, but also built new ways of analysing and accessing information. The reflective methods of creative writing focused upon emotional and relational elements and made use of intuition and creativity, thereby establishing alternatives to the empiricist overtones (Bryman, 2001) still prevalent in some conventional qualitative research.

The *initiation* purpose of mixing methods, Greene at al. (1989) suggest, is concerned with the more creative outcomes brought about by paradoxes and anomalies. That is, the fact that the theories and practices involved in a mixed methods approach proceed from divergent and often contrasting positions to inform the same research project, with 'very few guidelines for the contexts in which the two research styles can or should be combined … makes it inevitable that some outcomes will be unanticipated' (Bryman, 1992, p. 68). These unanticipated outcomes encourage researchers to explore new and innovative means of organising their research processes and challenge them to re-think the assumptions that Brannen (1992, p. 32) suggests

Table 1. Purposes for mixed-method evaluation designs.

Purpose	Rationale	Key theoretical sources
Development seeks to use the results from one method to help develop or inform the other method, where development is broadly construed to include sampling and implementation, as well as measurement decisions.	To increase the validity of constructs and inquiry results by capitalising on inherent method strengths.	Madey (1982); Sieber (1973)
Initiation seeks the discovery of paradox and contradiction, new perspectives of frameworks, the recasting of questions or results from one method with questions or results from the other method.	To increase the breadth and depth of inquiry results and interpretations by analysing them from the different perspectives of different methods and paradigms.	Kidder and Fine (1987); Rossman and Wilson (1985)
Expansion seeks to extend the breadth and range of inquiry by using different methods for different inquiry components.	To increase the scope of inquiry by selecting the methods most appropriate for multiple inquiry components.	Madey (1982); Mark and Shotland (1987); Sieber (1973)

Source: Adapted from Greene, Caracelli, and Graham (1989, p. 259).

are often 'a taken-for-granted set of ideas rather than a persistent self-conscious embrace of them'. Given the deliberate juxtaposition of conventional qualitative methodologies and indigenous ones, this purpose of teasing out fresh perspectives and re-evaluating accepted ones seems to offer fruitful opportunities for boundary breaking practices and theorising that could be especially appropriate for research by and for indigenous communities.

The potential for innovative outcomes from bringing together traditional and reflective methods resides in their diverging positions on subjectivity and truth. As O'Bryne points out in relation to traditional (critical) ethnography: 'The study of self and self-reflective data collection violate rigor criteria' (O'Byrne, 2007, p. 1385). However, I found that I could in some way bridge the gap between the trustworthiness of the recorded data of the traditional methods, and the highly subjective unrecorded memories and emotional data of my lived experiences through the act of writing. Writing also connected the apparently stable events of a fieldwork in the past with my subsequent and current experiences, giving them broader but also shifting meanings. These unstable constructions put pressure on me to reassess my assumptions about what constitutes valid knowledge and how it can be generated. Searching for ways to reconcile the tensions between the epistemological assumptions of the traditional and reflexive methods led me to Richardson and St Pierre's (2005) 'writing as a method' and a different set of criteria for evaluating ethnographic work, such as the potential to engage the audience through its aesthetic merit and impact. In this way the mixing of methods initiated knowledge-making practices which I believe challenge conventional research and which can also be usefully linked by indigenous researchers to the dynamics of oral traditions.

The third, inter-related purpose of *expansion* in the context of mixing conventional qualitative and indigenous research methods and methodologies serves to identify ways in which the insights from these divergent ways of producing knowledge can increase the number or scope of indigenous research practices. In Figure 1, the expanding area of the 'Indigenous research' could be conceptualised as developing in this way. A situation may therefore arise where several 'weakly' indigenous methods which have been initiated through mixing with conventional methods may combine to give rise to more (qualitatively and quantitatively) indigenous methods.

Mixing the traditional and reflective ethnographic methods in the way that I did meant that the data in the form of interviews and photographs, for example, were not only used to provide insight on the 'subjects' of the research, but also to analyse the researcher and researcher–other relationships, thus expanding the scope of the inquiry. Thus mixing methods allowed me to develop a more complete understanding of how I was being a researcher by enabling further and different insights into the relationships, emotions and processes that influenced how I created my researcher self and the 'others' of that situation. Constructing creative narratives from my reflections around the interviews and observations allowed me to expose ways in which personal factors such as my identity or even emotions, as well as broader relational factors of power/knowledge, affected the outcomes of the conventional methods. Therefore, by combining the methods I could identify positive and negative elements of my assumptions and practices, and then use these as a platform from which to build ethically appropriate ways of relating to others in a context of indigenous research.

A useful illustration of development, initiation and expansion through mixed methods is the research of Tomaselli, Dyll, and Francis (2008) who describe mixing several conventional and indigenous autoethnographic methods (indigenous ethnography,

native ethnography, complete member research and personal narrative) sometimes with some unexpected developments.

Generating indigenous methodologies within a CHAT framework

One way in which a mixed methods approach can practically achieve the development of indigenous methodologies would be by employing a cultural–historical activity theory (CHAT) framework. Currently in its third generation, CHAT explains learning as an interaction between two or more activity systems that address the dynamic nature of knowledge and knowledge production with the aim of instigating 'culturally new patterns of activity' (Engeström, 2001, p. 139). This approach makes use of the concept of expansive learning which involves an entire activity system ascending from the abstract to the concrete through a sequence of steps that start with individual subjects questioning the accepted practice (Engeström, 2004).This initial abstract questioning gives rise to a new idea which is modelled and examined, implemented and evaluated, so that it gradually expands into a collective movement and stabilises into a new form of practice (Engeström, 2004). From a CHAT perspective, expansive learning within the mixed methods project happens because conventional qualitative research and indigenous research, as two interacting activity systems, are pushing and pulling at each other, trying to formulate their new, shared object and activity, namely the theories, practices and values they generate within a researcher–researcher collaboration.

CHAT and the concept of expansive learning can be summarised by five major principles. The first principle is that of a 'collective, artifact-mediated and object-oriented activity system' (Engeström, 2001, p. 136) where individual and group actions are subordinate to the entire activity systems in terms of analysis. The second principle is that of multi-voicedness, where a multitude of views and interests negotiate and conflict with each other, creating trouble and innovation. Historicity forms the third principle of activity systems since problems and potentials are best understood in the context of the activities and the objects that they have shaped over time. The fourth principle relates to the central role of contradictions as sources of change and development. The tensions which are caused by contradictions within and between systems create disturbances and conflicts which tend to motivate innovation and change. The possibility of expansive transformations in activity systems constitutes its fifth principle. This is realised when 'the object or motive of the activity are reconceptualised to embrace a radically wider horizon of possibilities than in the previous mode of the activity' (Engeström, 2001, p. 137).

This article highlights mainly the way in which the expansive learning of the CHAT approach harnesses structural tensions to negotiate customised tools and practices through activity that captures both individual and societal agency. The 'radical localism' (Engeström, 1999, p. 36) of this approach resonates with the pragmatic approach adopted within mixing methods, which sees change-directed activity as addressing issues that are relevant, manageable and acceptable to the actors in their everyday lives. Avis (2007), however, argues that such connections to localised contexts tend to induce conservatism. He goes on to conclude that if the transformative potential of expansive learning is to be realised and becomes more than adaptive reform, greater recognition needs to be given to the antagonistic relations and the wider socio-economic and political context. This is not out of line with this article's anti-colonial position which insists on addressing wider relations of power/knowledge

when building indigenous knowledge into main stream research, while simultaneously affirming localised action through '"small acts" as cumulative and significant for social change' (Dei, 2000, p. 128). In this way small negotiated shifts of adaptable practices can incrementally change perspectives so that templates for new theories and values can be built up from them. Applied to the mixing of methods, this position agrees with Guba and Lincoln (2005, p. 200) that 'at the paradigmatic, or philosophical, level, commensurability between positivist and postpositivist worldviews is not possible', but elements of different paradigms, such as axiomatic elements, can be blended. This does not really contradict Morgan's (2007) position that a metaphysical definition of paradigms fosters incommensurability, while mixing methods at philosophically lower level of research practices and values may create research communities that more readily share common ground. However, this article envisions the possibility for interaction between diverse research communities as going beyond their commensurability based on similarity. Unlike Avis (2007), it sees opportunities for contradictory and even mutually exclusive elements to meet and fashion dynamic relationships in an attempt to address the structural tensions that exist between them. In expansive learning, these collaborations are described by Engeström (2004, p. 153) as 'knotworking':

> Knotworking is characterised by a pulsating movement of tying, untying and retying together otherwise separate threads of activity. The tying and dissolution of a knot of collaborative work is not reducible to any specific individual or fixed organisational entity as the centre of control. The locus of initiative changes from moment to moment within a knotworking sequence.

Thus, even though it may not be directly traced back to a central structural force, it is not detached from the greater context since the existing socio-economic and political framework will constantly be attempting to constrain or facilitate the developments initiated by the knotworking sequence. Knotworking also challenges the perception of learning and innovation as a vertical movement reaching up or down, and instead encourages sideways moves where alternative solutions are offered rather than trying to force a merger or compromise between incompatible solutions. Perhaps in the example of mixing traditional and reflexive methods, the perception of what is valid knowledge can be seen as fleetingly alternating between differing traditional and postmodern conceptions of rigor, neither of which conform completely to the epistemological ideals to which the project aspires.

It should be remembered, however, as mentioned earlier, that the agenda is a radical, counter-hegemonic one dedicated to the formation of, in this case, a philosophical orientation that is appropriate for indigenous people's ways of understanding reality and creating knowledge. It is this agenda that gives momentum to the change and while it remains in focus the change cannot stop at reform. The Marxist roots of expansive learning should thus drive the mixed methods project with its '"revolutionary practice", which is not to be understood in narrowly political terms but as joint "practical–critical activity", potentially embedded in any mundane everyday practice' (Engeström & Miettinen, 1999, p. 3).

Conclusion

In this article it has been suggested that the processes of development, initiation and expansion described earlier as purposes for a mixed methods approach, can be made

to articulate with those of expansive learning. By bringing together diverse ways of knowing and doing at the pragmatic and local level of daily practice, it is possible to engage the tensions of divergent methodological stances and hopefully stimulate the construction of new ways of doing research. This sentiment is neatly captured by Greene (2005) when she argues for the generative potential of the tensions arising out of diverse actors, perspectives, values and interests inherent in the mixed methods approach.

> [A] mixed methods way of thinking seeks not so much convergence as insight; the point is not a well-fitting model or curve but rather the generation of important understandings and discernments through the juxtaposition of different lenses, perspectives, and stances; in a good mixed methods study, difference is constitutive and fundamentally generative. (Greene, 2005, p. 208)

What should be generated, though, is an indigenous research methodology that has a life of its own – one that is free to initiate, benefit from, represent, legitimate and account for (Bishop, 2005) knowledge production involving indigenous people. I believe that, while the self–other hyphen serves the vital function of distinguishing between western researchers and indigenous people, it is also a lifeline for many researchers. As long as the knowledge that is traded across this boundary does not happen between equals, that is, western researchers and indigenous researchers, the legacy of colonialism continues. However, given the opportunity, an indigenous knowledge community could create an independent knowledge space from which indigenous people can organise their knowledge resources in a socially just manner according to their own philosophical, political and axiological imperatives. As non-indigenous researchers we can contribute to these efforts by critically examining our roles in hindering or facilitating this process.

Note

1. By mixed methods, I mean the more pragmatic mixing of research techniques at the level of practice which consider issues of explanation and justification of methods at an epistemological level to a lesser extent than mixing methodologies would do.

Notes on contributor

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