CrossMark

ORIGINAL PAPER

Reviewing the Transformative Paradigm: A Critical Systemic and Relational (Indigenous) Lens

Norma R. A. Romm

Abstract In this article I re-examine the tenets of the transformative paradigm as explained by Mertens in various publications. Mertens suggests that the transformative paradigm (as she names it) encapsulates the positions of researchers who question positivist/postpositivist- and interpretivist/constructivist-oriented approaches, which to date have been ascendant in the field of social research. She argues (following critical theorists) that researchers embracing a transformative paradigm as an alternative explicitly bear social justice issues in mind so that their inquiries become intertwined with a political agenda and are action-oriented towards generating increased fairness in the social fabric. In the article I consider her arguments and I add additional angles to them with reference to a number of authors (including myself) advocating critical systemic thinking-and-practice and advocating Indigenous systemic approaches. I consider some implications of the revised understanding of the transformative paradigm (and its relationship to "other" paradigms) for operating as a researcher.

Keywords Transformative paradigm · Systemic research practice · Postcolonial Indigenous paradigm · Action-oriented research · Active research

Introduction

This article begins with a discussion of Mertens' argument regarding research paradigms, and in particular the transformative paradigm, which she has named and elucidated in various publications. She suggests that at present "no unified body of literature is representative of the transformative paradigm", but there are various characteristics "which are common to the diverse perspectives represented within it and serve to distinguish it from

N. R. A. Romm (✉)
Department of Adult Education and Youth Development, University of South Africa,
P.O. Box 392, Pretoria 0003, South Africa
e-mail: norma.romm@gmail.com

🖄 Springer

the postpositivist and constructivist paradigms" (2010a, p. 21). She sets out to explicate and to further spell out/develop) these characteristics. In this article I discuss her explication of the transformative paradigm with reference to her views on ontology, epistemology, methodology and axiology and the links between them within this paradigm. I indicate that in different writings she offers somewhat different emphases, but her overall purpose is to explore what "transformative" might mean in the context of research. Mertens defines the transformative paradigm by drawing on and adapting various authors' typologies, such as those supplied by Lather (1992) and Lincoln and Guba (2003), where distinctions are made between emancipatory approaches (which she re-names as *transformative*) and *positivist/postpositivist-oriented*, and *interpretive/constructivist-oriented* approaches. (She also singles out a *transformative* versus *pragmatic* use of "mixed methods", adding *pragmatism* to Lincoln and Guba's typology.)

In the course of the article I introduce arguments offered by a number of critical systemic thinkers, whose theory-and-practice is also (like hers) inspired by the critical theoretical tradition. I deliberately hyphernate theory-and-practice here to point to what Ivanov calls the "systemic idea of the relationship between theory and praxis in which the two are inseparable" (2011, p. 498). I show how this way of understanding critical systemic research means that *knowing processes are not seen as separable from the continuing unfolding of social and ecological life (where everything is seen as fundamentally connected)*. I relate these arguments to those of certain authors proposing the need to feature Indigenous views on systems and on research more strongly as a way of decolonizing research practice and effecting transformation accordingly. I then consider how all of these approaches offer views on how one can engage in research by being more cognisant of its "active" component. I indicate that action-oriented research need not necessarily mean following the traditional action research cycle. I conclude with some considerations around including additional paradigms into typologies of what are understood to be the "major" paradigms (as Mackenzie and Knipe put it), as set out in Table 1.

Mertens' Explication of the Transformative Paradigm

Mertens indicates that she understands "transformative theory" as an umbrella term that encompasses paradigmatic perspectives that are meant to be emancipatory, participatory, and inclusive (1999, p. 4). She states that "the transformative paradigm is characterized as placing central importance on the lives and experiences of marginalized groups, such as women, ethnic/racial minorities, people with disabilities, and those who are poor". When embracing this paradigm, efforts are made by inquirers to "link the results of social inquiry to action, and [to] link the results of the inquiry to wider questions of social inequity and social justice" (1999, p. 4).[1]

In order to spell out further the qualities of the transformative paradigm, she refers to its underlying ontological, epistemological and methodological orientations. She elucidates that "the transformative paradigm is based on ontological, epistemological and methodological assumptions that are different from those underlying the postpositivist and interpretive/constructivist world views" (1999, p. 4). (She prefers to speak of *post*positivist views as these are more sophisticated arguments which have developed, and which do not

---

[1] Mertens is here placing her discussion in the context of doing research toward program evaluation—but her statements can be seen as applying to all forms of research as she questions the distinction between "evaluation" and "research" (1999, p. 5).

Table 1 Paradigms: language commonly associated with major research paradigms

Positivist/postpositivist	Interpretivist/constructivist	Transformative	Pragmatic
Experimental	Naturalistic	Critical theory	Consequences of
Quasi-experimental	Phenomenological	Neo-marxist	actions
Correlational	Hermeneutic	Feminist	Problem-centred
Reductionism	Interpretivist	Critical Race Theory	Pluralistic
Theory verification	Ethnographic	Freirean	Real-world practice
Causal comparative	Multiple participant	Participatory	oriented
Determination	meanings	Emancipatory	Mixed models
	Social and historical	Advocacy	
	construction	Grand Narrative	
	Theory generation	Empowerment issue	
	Symbolic interaction	oriented	
		Change-oriented	
		Interventionist	
		Queer theory	
		Race specific	
		Political	

Mackenzie and Knipe had an additional term "Normative" in the first column, but I have removed it as I regard it as somewhat out of place—given that positivism/postpositivism holds that scientists should strive for value-freedom (objectivity) in the research process

Source: McKenzie and Knipe, 2006, p. 195 (http://www.iier.org.au/iier16/mackenzie.html) (Adapted from Creswell, 2003, and Mertens, 2005)

presuppose that any statements about reality can become verified—rather it is recognized that knowledge is always provisional.[2]) She outlines the differences between these paradigms as follows.

She states (1999) that within a transformative paradigm the ontological question, "*What is the nature of reality and by extension, truth*?" is not answered (as in postpositivism) by assuming that we have some access to it via processes of science; nor is it answered (as in constructivism) by asserting that there are multiple realities that are constructed in processes of living and knowing. Rather, the ontological question is answered by "placing various viewpoints within a political, cultural, and economic value system to understand the basis for the differences"—so as to understand how certain perspectives on reality become privileged over others (1999, p. 5). How specific constructions of reality come to be given more weight in society and *how researchers can serve to undercut undue privileging of views, are the (ontological) concerns of the transformative researcher.*

As far as epistemology goes, she argues that *the question of what "knowing" amounts to* is not answered by claiming (as in postpositivism) that the quest for objectivity (observing from a somewhat distant and dispassionate standpoint) can lead to increased knowledge, nor by simply asserting that the interaction between researchers and participants generates the constructions that are developed in the research process (as in forms of interpretivism/constructivism). In the transformative paradigm *the manner in which researchers relate with participants such that a fair understanding of key viewpoints is created and such that the power of the researcher to frame questions does not overpower the "results" is considered as crucial* (1999, p. 5).

Methodologically, Mertens states that the postpositivist paradigm is characterized as "using primarily quantitative methods that are decontextualized" (as the dominant

---

[2] She states that this can otherwise be called the "scientific method paradigm" (1999, p. 4).

methods to which it accords most status). The interpretive/constructivist paradigm is "characterized as using primarily qualitative methods in a hermeneutical … manner (to aid the interpretation of meanings as expressed by participants). These are its principal methods, which are given more status in the research endeavor to add depth to the investigation. Mertens suggests that what is specific about the transformative paradigm is that it might involve quantitative, qualitative, or mixed methods[3]—*but the community that is most impacted by the research needs to be "involved to some degree in the methodological decisions"*. She therefore argues that what is important methodologically is that when conducting research underpinned by a transformative paradigm, researchers confer with key participants in defining which method(s) to use (and how). She cites, for instance, a project where researchers used a strategy that "involved surveying disabled people before conducting a survey to determine the effectiveness of the Americans with Disabilities Act". She indicates that:

> We used their responses in constructing both the design and the survey instruments, recognizing—based on what we had learned from them—the need to ask probing questions of business owners and operators not just about observable barriers, but also about invisible ones, such as whether a blind person with a guide dog might be refused entry to a cafe or restaurant. (1999, p. 10)

She cites another example, of how, in a court access project where she was one of the researchers:

> We designed the data collection forms with an eye towards facilitating transformative change. As part of the training programs for judges and other court personnel, we invited deaf and hard of hearing people and their advocates to attend the training workshops with representatives of the court systems in their state [with a focus on creating action plans]. (1999, p. 11)

The research thus proceeded from initial data collection via forms which were designed with key participants (from the deaf and hard of hearing communities), to the holding of action-oriented workshops, which were co-designed with court personnel and representatives of the deaf and hard of hearing) so as to make "plans for future actions" (1999, p. 11): with the (initiating) researchers not shying from setting up participative change-oriented inquiry processes where consideration/exploration of future options were seen as part of the inquiry process.

In later writings (e.g. 2007a, b, 2010a, b, 2012) Mertens elaborates on her understanding of ontological epistemological and methodological assumptions of the transformative paradigm and on the link between these various assumptions. She also adds, following Lincoln and Guba (2003, p. 265) the *axiological question* (alongside ontology, epistemology and methodology). Lincoln and Guba point out that they added axiology into their layout of paradigms in order to "make values (the branch of philosophy dealing with ethics, aesthetics and religion) a part of the basic foundational philosophical dimension of paradigm proposal" (p. 265). This, they propose, enables us to better identify critical theorists' concern with "liberation from oppression and freeing of the human spirit, [which are] both profoundly spiritual concerns" (p. 265). That is, by adding into the discussion of paradigms researchers' views on ways in which values enter (if at all) into processes of

---

[3] Mertens qualifies this by stating that "mixed methods designs that use both quantitative and qualitative methods can be used in any paradigm; however, the underlying assumptions [that researchers are bringing to bear] determine which paradigm is operationalized" (1999, p. 5).

social inquiry, we are better equipped to understand various researchers' positions on this score. Now Mertens argues that as far as ethical issues are concerned, the transformative paradigm exhorts researchers to make "an explicit connection … between the process and outcomes of research and furtherance of a social justice agenda" (2007a, p. 216). This, for her, is not a matter of showing a commitment to University Institutional Review Board requirements, where the focus is on matters such as ensuring informed consent of participants, ensuring that they are aware of their right to withdraw, ensuring that concerns with not harming them will be taken into account, etc. (2009, pp. 222–223). It goes much further than this and requires that active quests to further social justice are accommodated within the research agenda.

With this understanding of ethical accountability, she argues indeed (2010b, p. 470) that "the axiological belief is of primary importance in the transformative paradigm and drives the formulation of the three other belief systems (ontology, epistemology and methodology)". Or, otherwise put, "the axiological assumption provides a conceptual framework from which the other assumptions of the paradigm logically flow" (2012, p. 811). She also makes the point that although some authors associate mixed-method research with a "pragmatic paradigm" and use "pragmatism" to philosophically justify their use of more than one method, she herself prefers to use a transformative paradigm as philosophical basis for mixed-method use. This then requires researchers to consider how the use of mixed methods might serve the ends of social justice (2010a, p. 8). (Flood and Romm similarly observe that often in practice with pragmatism as an approach, options may be united eclectically on the grounds that it "seems to work" to unite them, but "theoretical reasoning around the claim that 'this works' is limited"—see 1996a, p. 589. Mertens' suggestion is that *an axiological basis where an ethic of justice prevails* would provide the grounding for deciding—with participants—choices of method and how to use the different methods.)

When discussing *ontology* in her article on the transformative paradigm (2007a), Mertens expands on her earlier (1999) account and suggests that "transformative researchers need to be aware of societal values and privileges in determining the reality that holds potential for social transformation and increased social justice" (2007a, p. 216). She suggests that what counts as "reality" for transformative researchers is therefore *what definitions (constructions) can be said to have most leverage in effecting change towards increased justice*. She elaborates that

> the ontological assumption of the transformative paradigm holds that reality is socially constructed, but it does so with a conscious awareness that certain individuals occupy a position of greater power and that individuals with other characteristics may be associated with a higher likelihood of exclusion from decisions about the definition of the research focus, questions, and other methodological aspects of the inquiry. (2007a, p. 216)

Put differently, she suggests that those embracing a transformative paradigm concede (with constructivists) that reality is socially constructed, but try to ensure that "exclusions" of the less powerful in construing ways of defining issues are not unduly perpetuated via the research process. Interestingly, in further explicating the ontological tenet of the transformative paradigm (2010b), she offers a somewhat different approach, in order to distinguish her argument from constructivism. Here she suggests that:

> The transformative ontological assumption recognizes that there are many versions of what is considered to be real and is cognizant of the constructivists' discussion of

the social construction of multiple realities. Yet it diverges from this belief in that it holds that *there is one reality* about which there are multiple opinions. (2010b, p. 470, my italics)

She asserts that one can and should still posit a reality—even though we have no access to it but only to multiple opinions about it. I will return later (critically) to this account of hers—when discussing the suggestion put forward by various critical systemic thinkers that in a systemic worldview (ontology) there is no attempt to uphold an ontological dualism between "observer" and "observed" (so-called external realities).

In discussing implications for epistemology in her article on the transformative paradigm (2007a), she elucidates her position as follows:

To know realities, it is necessary to have an interactive link between the researcher and the participants in a study. Knowledge is socially and historically located within a complex cultural context. (2007a, p. 216)

Here she uses the term "know" implying that some kind of "knowledge" can be attained as long as one enters into a dialogical relationship with participants—but she also points out that "knowledge is socially located"—implying that it is a constructed product. Again, I return to this later in the article (when discussing certain Indigenous authors' arguments concerning the social construction of reality during knowing processes).

As far as *methodology* is concerned, she expands on her earlier works as follows:

A researcher can choose quantitative or qualitative or mixed methods, but there should be an interactive link between the researcher and the participants in the definition of the problem, methods should be adjusted to accommodate cultural complexity, power issues should be explicitly addressed, and issues of discrimination and oppression should be recognized. (2007a, p. 216)

She underscores that transformative researchers take care to work together with research participants when choosing appropriate methods—but she emphasizes more strongly (than in her earlier works) that the prime participants to which researchers should feel allegiance are those who are dealing with the brunt of "issues of discrimination and oppression" (2007a, p. 216). This concurs with her account in her article on transformative considerations (2007b), where she notes that the axiological assumption in the transformative paradigm *"leads to an awareness of the need to redress inequalities by giving precedence, or at least equal weight, to the voice of the least advantaged groups in society"* (2007b, p. 86, my italics). She expands further on this (with what can be said to be a different emphasis again) when noting (2010b) that:

The transformative belief systems discussed thus far [axiology, ontology and epistemology] lead to methodological beliefs about appropriate ways to gather data about the reality of a concept in such a way that we have confidence that we have indeed *captured the reality in an ethical manner* and that has potential to lead to the enhancement of social justice. (2010b, p. 472, my italics)

She refers to "capturing the reality in an ethical manner"—arguing that such a "capturing" can be defined by its potential to enhance social justice. Her use of the word *capture* is somewhat ambiguous, though. If one concedes that understandings of "reality" are not neutral (and are imbued with ethical concerns), then the word *capture* here can (better) be interpreted as meaning that one is *not presuming to grasp some posited reality*, but is *working towards generating what one understands—with others—as a defined*

increase in justice. This is the point made by critical systemic thinkers (as well as others reflecting on the nature of research and its impact in society) to which I turn later.

Returning to Mertens' argument, she notes that *axiological assumptions* in the constructivist paradigm also are giving rise to more "leaders in the field" citing the "need to situate their work in social justice" (2010a, p. 21). She refers to self-named constructivists who refer to the doing of research in "ways that are both respectful of the human relations between researchers and participants … [and aimed at] enhancing the furthering of social justice from the research" (2010a, p. 18). Mertens sees this "shift in constructivist scholarship" as "as indicator of the permeability of paradigmatic boundaries" (2010a, p. 21). But what Mertens does not highlight is the constructivist argument that social realities can be said to be *formed* (and not just "found/captured") via the process of research (at the moment of doing research) as explained, for example, in Romm (1996, 2001a, b, 2002, 2010). In the next section I turn to this issue through the lens of the writings of certain critical systemic thinkers/researchers, who focus on the way in which worlds are "brought forth" via the languaging between humans (Bawden, 2011, p. 4). Bawden summarizes this (critical systemic) argument thus:

> If we are to bring forth … different worlds as a function of a quest to transform the way we live our collective lives … we will need to modify the epistemes [ways of knowing and living] that come to dominate the modernist culture. If our interconnectivities and inter-relationships with those in other [less modernist-oriented] cultures as well as with the rest of nature are to be developed in a manner that is sustainable, defensible, responsible and inclusive, we will need to establish epistemes that are appropriate to the task. (2011, pp. 4–5)

Bawden highlights that "appropriate" knowing is a matter of recognizing how our languaging *constructs and creates worlds which are in processes of becoming*, and on the basis of this recognition, *taking some responsibility for the way in which we bring forth worlds* (with others). That is, just because knowing necessarily creates an intervention (albeit that this may be more or less recognized by people and within cultures), it is incumbent upon us to consider carefully the values that are being brought to bear when bringing forth different worlds. This, I would argue, is the crux of critical systemic thinking and practice as explained below.

Critical Systemic Thinking and Practice

As mentioned earlier, Ivanov indicates that in a critical systemic approach—with the emphasis on *systemic* rather than on systems—"the systemic idea of the relationship between theory and practice" is borne in mind by those practicing such an approach (2011, p. 498). He cites Midgley as making it clear that in some sense it is the critical systemic researchers' ideology and ethical stance that determines the choosing of methodologies (with chosen participants) and the choosing of goals with participants (such as improvements towards social justice). Before explaining this argument, I will first briefly explain Midgley's (1996) summary of the commitments of Critical Systems Thinking (CST) as developed by those naming and developing it as a distinct systems approach, namely Flood and Jackson (1991). Midgley summarizes that according to Flood and Jackson those practicing CST can be seen to embrace the following three commitments:

- *Critical awareness*—examining and reexamining taken-for-granted assumptions, along with the conditions that gave rise to them;
- *Emancipation*—ensuring that research is focused on "improvement", defined temporarily and locally, taking issues of power (which may affect the definition) into account;
- *Methodological pluralism*—using a variety of research methods in a theoretically coherent manner, becoming aware of their strengths and weaknesses, to address a corresponding variety of issues. (Midgley, 1996, p. 11)

We can see from this summary that these commitments bear similarity to Mertens' discussion of the orientation of what she calls "transformative scholars" (1999, p. 1) to:

- *re-examine assumptions* (and re-examine the privileging of certain views and approaches that have become entrenched in society);
- *orient research to creating improvements towards more social justice;* and
- use mixed method research not merely in a pragmatic manner *but in a manner consistent with a critical theoretical transformative approach.*

Midgley notes, though, that apart from the commitments which supposedly define CST, there is no consensually accepted definition of the nature of the commitments, which are spelled out differently by different authors who self-label themselves as CST proponents (1996, p, 12). He suggests also that further to the original writings of Flood and Jackson (1991), they can be said to have each shifted their positions—for example, he sees the book by Flood and Romm (1996b) as one instance of such a shift (Midgley, 1996, p. 12). He also argues that new/alternative ways of conceptualizing CST were already germinating in, for example, Midgley (1990), Flood (1990), and Gregory (1992). What I would like to focus on here is the *"shift" towards recognizing the impact of ways of knowing (and framing of issues/problems) on the unfolding of "systems"*. Midgley notes that from his experience, when relating with participants as a systemic researcher, "many people welcome the chance to look at how the problem they have identified interfaces with others, and appreciate systemic logic" (1996, p. 21).

Reviewing the Transformative Paradigm: Emphasizing our Impact (as Knowers) on Emergent "Realities"

What seems to me is not sufficiently highlighted in Mertens' explication of the transformative paradigm is the requirement for us to appreciate that "knowing" *itself exerts an impact on the "realities" to be "known"—that is, on their manner of unfolding*. When Mertens states (2010b) that the transformative paradigm asserts that there is one reality (even though we may not be able to access it) I would suggest that she does not sufficiently accentuate how the process of knowing *already can be said to have impacts at the moment of "doing research"* (cf. Romm, 1995, 1996). Hence researchers working within this perspective are called upon to recognize that "knowing" generates an intervention in defining the direction that social (and ecological) systems might develop (with knowing being part of these systems, as noted also by Bawdens, 2011).[4] It is for this reason that it is incumbent on us to try to consciously intervene in a justifiable and responsible way. This idea is also expressed by Eser when he refers to what he calls justified intervention (which

---

[4] It is worth mentioning here that I have added the word ecological systems because Midgley (1996, p. 21) is concerned that the term *human emancipation* as often used within CST and other critical theoretical texts might deprioritize our thinking around ecological well-being—or what McIntyre-Mills terms social and ecological justice (2008, 2014). It is not clear to what extent Mertens too takes ecological considerations into account when speaking about social justice.

is dialogically based, and which involves considering with others how our languaging affects the "outcomes" that arise through the way we speak and act—2014, p. 379). Or as Ali summarizes this concern:

> If we are to have confidence in our research we need the to be constantly aware of how this research impacts on others …. Concerns about impact are less obvious when researching with objects [non-humans] although of course this need not be the case. (2010, p. 246)

Bishop and Shepherd (2011) add a caveat to this, though, when they note that it is not necessarily clear, either in advance or in hindsight, what kinds of effects our research endeavors might have. As they state in relation to research in the social arena, "we cannot know or articulate the effect we have on others (which changes depending on the person)". Even though we do know that self-biographies and concerns that researchers introduce when doing research will make *some* difference to the "outcomes" we cannot know in exactly what way this will be the case—but nor can we "evade [our] influence" (2011, p. 1290).

In his book on *Systemic Intervention* (2000), Midgley indicates why this argument can be considered as systemic at root (in contrast to a dualist perspective):

> The term "subject/object dualism" refers to the separation of the observer (subject/knower) and the observed object (or that which is being researched). In a dualist perspective the observer is somehow independent of the observed, standing outside of it, so she does not influence it in any way. (2000, p, 42)

He states that a dualism that sees a separation of observer and observed is regarded as problematic by systems thinkers (and certainly, by *systemic* thinkers). He argues that in a systemic (anti-reductionist) perspective, "*everything can be seen as interacting with everything else* (and boundaries are constructs allowing the inclusion and exclusion of elements in analysis, rather than being real markers of systemic closure)" (2000, p. 42, my italics). This means *that the observer will always be connected with the observed* (as they are all part of a system where parts can never be separated). He argues that quantum theory in the natural sciences also "challenges the conventional separation between the observer and observed by demonstrating that the former cannot help but influence the latter" (2000, p. 43). In this respect see Davis (1997) and Romm's discussion hereof (2002).[5] Bausch and Flanagan (2013, p. 420), citing De Zeeuw (1996), spell out further the (constructivist as well as transformative) implications of seeing "observations" as "observer dependent". They indicate that for De Zeeuw, the aim of knowers then is to explicitly develop constructed objects "which will be useful" for furthering action (in this case action for both social and ecological improvement).[6]

---

[5] In relation to natural scientific inquiry, Davis argues (following Wheeler, 1982) that we can be said to be living in an "observer participatory universe", in which "we are the ones who … first establish the iron posts of observation and then weave the brilliant tapestry of reality between them" (Davis, 1997, p. 277). Drawing on a range of examples, he shows how the world can manifest itself in alternative ways, depending on how we weave the tapestry.

[6] They argue that it is with this understanding of the relationship between observer and observed that Christakis and Warfield (also influenced by authors such as Ozbekhan and Churchman) developed a "systems approach for influencing the stream of world events" (2013, p. 425). See also Christakis's (2004), Christakis and Bausch's (2006), and Bausch and Flanagan and Christakis's (2010) discussions of structured dialogical processes for furthering this aim.

Midgley argues that the "problem is that subject/object dualism is so ingrained in Western thought that it is very difficult to even identify in some instances, let alone challenge it" (2000, p. 44). This is indeed the argument too of authors wishing to revitalize Indigenous research methodologies (and ways of knowing) by focusing on Indigenous views of systems (cf. Chilisa, 2012; Dillard, 2006; Goduka, 2012; Harris and Wasilewski, 2004; Murove, 2005; Kovach, 2009; Smith, 1999). I would suggest that Mertens' axiological tenet of the transformative paradigm could be strengthened by suggesting *that just because we always have an impact on the realities that we "observe" (even though we cannot specify exactly what this is) it is required of researchers (those involved in inquiries) to engage with others in considering potential impacts, with the hope of generating justifiable impacts.* Our responsibilities arise because research *makes,* rather than *finds* realities.

In other words, that there is no purpose in positing that "there is one reality" (as Mertens, 2010b posits). Rather, one should lay the emphasis on Mertens' proposal in her article (2007a) where she suggests that *reality statements that arguably hold (most) potential for generating action toward increased justice* should be the focus of the transformative researcher. This way of looking at reality statements (or visions of reality) invokes what Kvale sees as an extended pragmatic epistemology. Kvale spells out the principles of such an approach to "truth": A pragmatic approach implies that truth (ways of bringing forth worlds) "is whatever assists us to take actions that produce the desired results. Deciding what are the desired results involves value and ethics" (2002, p. 302).

When research is directed by the quest to arouse transformative action, then one would prioritize the criterion of *catalytic validity* as a way of justifying the research endeavor (as indeed also referred to by Mertens when she speaks about catalytic authenticity, 2004, p. 109).[7] Chilisa also speaks about catalytic and tactical authenticities as strategic orientations that might be adopted by researchers, where research is designed so as to maximize possibilities for prompting/inspiring action (2012, p. 172). In terms of this (epistemological and axiological) orientation, research is not directed towards trying to prove visions (approximately) "true" or "false", but more towards defining, with others, potential for social and environmental justice. As noted above, Mertens focuses more on *social* justice while other authors—especially Indigenous-oriented and inspired authors—stress in addition ecological justice as of prime concern. Indigenous authors also focus more clearly on the (systemic) idea that we all participate in "the whole", and that "all is connected" in the web of life.

Some Indigenous Understandings of Connectivity

In this section I attempt to offer some Indigenous understandings of connectedness/relationality, while recognizing that to speak of Indigeneity is not to suggest that the Indigenous ideas referred to are either uniform (for Indigenous people across the globe) or static. In this regard I follow Smith who, writing from a Maori standpoint, argues that Indigenous people can be said to be in a process of "writing or engaging with theories and

---

[7] Lather (1986) is well-known for using the term catalytic validity as one way of defining how research processes can attain validity other than through the search for "truth" as representation of some posited realities). She argues that research can never be a "pure" description/explanation, purified of researchers' concerns (1986:64). Furthermore, it is never neutral in its social consequences. She points to the importance of recognizing "the reality-altering impact" of the research process (1986, p. 67).

accounts of what it means to be Indigenous" (1999, p. 154). While acknowledging the diversity within meanings of Indigeneity, Smith points out that a "common" thread that Indigenous authors stress, is the "importance of making connections and affirming connectedness …. Connectedness positions individuals in sets of relationships with other people and with the environment" (1999, p. 148). Smith indicates some implications hereof for practising "decolonizing methodologies".

Following up on this, in her book on *Indigenous research methodologies* Chilisa (2012) explains the qualities of relationality in respect to ontology, epistemology and axiology. Like Smith, she indicates that "postcolonial Indigenous research paradigms" offer a way of conceptualizing the web of relations in which we can be said to be enmeshed.. Chilisa explains that *a relational ontology* (worldview) focuses on "the web of connections of people with each other and with living and non-living things" (p. 109). She notes that in the African context the philosophy of *Ubuntu* (summed up in the African Adage "I am because we are; we are because I am") expresses a world view of "existence in relation and being for self-and-others" (p. 109). (She argues that similar adages can also be found, for example, in Maori expressions.) In terms of research relationships with (human) participants, she argues that this implies that "the researcher becomes part of circles of relations that are connected to one another and to which the researcher is accountable" (p. 113). She also sees that we should be preserving/developing harmonious rather than exploitative relationships with non-living things (e.g. via ecologically sensitive thinking and practice). She sums up this systemic worldview: "people … are embedded in a web of relations and interconnectedness that extends to nonliving things. Understanding this type of reality requires a back and forth movement that connects to this web of relations" (2012, p. 186). The "reality" that Chilisa posits is thus a worldview where all things including knowers/people as part of the web, are seen as inextricably connected.

Along with her elaboration of a relational ontology, Chilisa points to the implications of upholding a *relational epistemology* (understanding of knowing). She cites Thayer-Bacon's criticism of Euro-Western theories of knowledge, which are for the most part focused on how *individuals* come to "know" (2003, p. 9, my italics). She notes that more important within Indigenous knowledge systems is the recognition that "knowing is something that is *socially constructed by people who have relationships and connections with each other, the living and the nonliving and the environment*" (p. 116, my italics).[8] She here takes a social constructivist view, where it is held that people jointly construct ways of seeing and being in relationship with one another and in recognition of their connectedness with one another and "the environment". Goduka makes a similar point when she argues that while Western-oriented epistemologies may be inclined to devalue communal modes of thinking, what is specific about indigenous modes of knowing is that they are *intentionally communally oriented*. As she explains: "Communal knowledge ensures that knowledge is not collected and stored for personal power and ownership by individual specialists, but is rather developed, retained and shared within indigenous groups for the benefit of the whole group" (p. 5). This of course implies a view of ethics, namely a relational ethic.

Chilisa describes the ethical stance embedded in a *relational axiology* by suggesting that in terms of a relational axiology, research should be guided by "the principles of accountable responsibility, respectful representation, reciprocal appropriation, and rights"

---

[8] This understanding of the way in which social meanings are constructed is congruent with the trusting constructivist position as spelled out by Romm (2001a, 2002, 2010). It is also consistent with Lincoln and Guba's point that "the meanings we associate with any … tangible reality [as we experience it] or social interaction … determines how we respond" (2012, p. 12).

([2012](), p. 117). That is, a relational axiology expects that researchers will recognize their accountabilities and their responsibilities (in the light of their necessary impact on social life and on living and non-living things) and will inform their research accordingly. Chilisa indicates that for her, as for other Indigenous authors, this implies a participatory approach—in which participants (especially marginalized ones) are part of the research at all stages hereof. This means that they participate in the framing of research questions, in the choice and use of methods, in the way that "findings" are drafted and discussed, and in the way that meetings are held with audiences to review the findings and their import. These recommendations for participatory research are similar to the ones put forward by Mertens when she discusses the methodological tenets of the transformative paradigm:

> The transformative methodological belief system supports the use of a cyclical model in which community members are brought into the research process from the beginning and throughout the process in a variety of roles ([2010b](), p. 472)

Mertens recommends that the various roles adopted by initiating "researchers" and "community members" (who become part of the research) are to be negotiated between the parties. Mertens underlines that part of the cycle of transformative research is that the various people (researchers/co-researchers/research participants) actively seek options for "social change" ([2010b](), p. 473). She notes that when research work proceeds in this manner, then researchers can be said to be operating in a transformative spirit even if they do not explicitly label their work by placing it in the transformative paradigm. She also makes the point (including with reference to Chilisa, whose various works she cites) that "indigenous peoples and scholars from marginalized communities have much to teach us about respect for culture and the generation of knowledge for social change" (p. 474).

Cram et al. ([2013]()) in their introduction to the edited book *Indigenous Pathways into Social Research* explain that the emphasis on relational constructs within a postcolonial indigenous research paradigm "emanates from Indigenous value systems that recognize the connections between people, past, present, and future, and all living and non-living things" (p. 16). They go on to state that "connectivity is important for the ethical basis it provides for making decisions about research" (p. 16). They point out that protocols developed by indigenous researchers in various parts of the globe have "seen the growth of indigenous-informed (and culturally responsive) participatory research methodologies" (p. 18). They cite the "growth of community-based participatory research in the United States and participatory action research in other parts of the world" that is inspired by Indigenous worldviews/paradigms ([2013](), p. 18). What is emphasized here is that the notion (and experience of) connectivity forms a basis for recognizing that in whatever way people proceed as a researchers/inquirers, *the inquiry itself will serve to influence the patterning of social life*; it is this recognition that, as Chilisa puts it ([2012](), p. 13) "invites researchers to interrogate their roles and responsibilities as researchers". And as Kovach stresses, this interrogation can serve to prompt researchers steeped in Western traditions "to engage in reflexive self-study, to consider a research paradigm outside the Western tradition that offers a systemic approach to understanding [and being in] the world" ([2009](). p. 29).

Similarly to Cram et al., Kovach notes that within qualitative inquiries in the participatory tradition (such as in participatory action research) there are already "allies for Indigenous researchers", especially insofar as such research is directed towards "giving back to a community through research as praxis" ([2009](), p. 27). But Kovach argues that there is still room for strengthening the idea of "self-in-relation" (a translation of the Cree word *nisitohtamowin*" ([2009](), p. 27) as manifested in research practice.

I now proceed to show links between these) arguments and various notions of participatory action or active research.

Action, Action-Oriented and Active research

In this section I show how Flood unites systemic thinking with intervention/action research and how this can be said to offer a broader definition of AR than is normally understood in the traditional action research cycle. I indicate that systemic "action research" or "action-oriented" research indeed connects with Cram, Chilisa and Mertens' account of Indigenous protocols for doing research which "stress the importance of principles such as respect and reciprocity, the importance of elders, and cultural and spiritual protocols" (2013, p. 18). I show too how this can be seen as related to Mertens' conception of involving research participants in various ways and in various stages of the research. I point out that terms such as *action-oriented* or *active* allow for researchers (with participants) to operate broadly with an understanding that research is always connected to social and ecological outcomes. This creates a basis for choosing with participants' ways of proceeding and ways of making research "useful". Space in this article does not afford a full discussion hereof, so I offer only some pointers.

In the course of deliberating around the relationship of systems thinking to action research Flood makes the point (along with others) that the term *systemic* is preferable to *systems* in that the focus is on operating with an appreciation that the social construction of the world (of which we are *part* rather than *apart*) is systemic (2001, p. 133). Flood refers to complexity theory (a type of systemic thinking) which, he notes, "explains that the vastness of interrelationships and emergence in which people are immersed is beyond our ability to establish full comprehension" (2001, p. 140). He remarks that one of the implications of this is that "human understanding will always be enveloped in mystery". Far from seeing this as problematic, Flood proposes that "once this idea is grasped, a systemic appreciation of spiritualism then envelops the entire human experience and consequently everything that happens within that experience, including action research" (2001, p. 141). Flood criticizes a reductionist-oriented science, which fragments the world "and alienates so called parts, for example you and me from patterns and rhythms of life in which we participate" (2001, p. 142). He prefers the spiritual quality of a "deep systemic view that pictures each person's life as a flash of consciousness, in existence and of existence" (2001, p. 142). He states that such a view leads to a perception of wholeness, not of individuals and objects" (2001, p. 142). He argues that a systemic view understood in this way, "is not an approach to action research, but a grounding for action research that may broaden action and deepen research" (2001, p. 143).

That is, if "action research" is adopted with a systemic understanding as basis, then "actions" are broadened as participants recognize their interconnectedness with the mysterious whole and recognize (on a spiritual level) that what they do to others (living and non-living) will not be without consequences for them (and for others). Nonetheless, operating in terms of a systemic view does not imply that all participative research/inquiry need follow the traditional action research cycle of developing plans, acting, observing, and reflecting on consequences (cf. Dick, 2014). It can imply a variety of ways of practicing a participatory approach (as proposed by, for example, McKay and Romm, 2008). Romm (2014) spells out this argument when she speaks of "active and accountable inquiry", where "activity" can take a variety of forms on the parts of "researchers" and "research participants"—depending on how their various roles are envisaged. This clearly

resonates with Chilisa's point that what is important is that "researchers interrogate their roles and responsibilities" (2012, p. 13).

Permeability of Paradigms and Creating Space for Additions

To conclude this article I wish to offer some considerations around the "big four" paradigms as well as the additions of "new" alternatives (that are new to Western-oriented typologies). As indicated in my Introduction, Mackenzie and Knipe (2006) offer a presentation of the four paradigms (postpositivist, constructivist, transformative and pragmatic) that have served as a reference point for a myriad of discussions around paradigms in the research literature.

I have focused in this article on the transformative paradigm and shown how it bears a close relationship to, but at the same time can be strengthened in terms of, a "communication" with a critical systemic approach and also with postcolonial Indigenous paradigms. In her discussion of characteristics, conversations and contexts of Indigenous methodologies, Kovach accepts that the four-paradigmed rubric supplied by Mertens offers an inclusive space, which also accommodates Indigenous research practices (2009, p. 27). Nevertheless, Chilisa (and others), in speaking about *postcolonial paradigms*, seem to be wary of typologies which do not give sufficient recognition to the distinctiveness of these alternative "pathways to research". Dillard expresses her reservations (as an African American woman) regarding her approach being subsumed under the "big four". She indicates that she wishes to embrace a paradigm that "resonates with my very spirit and provides some congruence and support for the work that I do, as an African-American woman scholar" (2006, p. 65). She continues:

> Rather than subvert the Big Four (or worse yet, create a replicated "sub-version" of the same), I seek to embrace and create a paradigm that embodies and articulates a coherent sense of life around me, as an African-American woman. (2006, p. 65)

When explicating the transformative paradigm, Mertens cites Indigenous authors' work as fitting in with, and contributing to, the transformative paradigm. But Dillard (and many Indigenous researchers) prefer to add additionals to the "big four" so that their positions (including their specific understandings of spirituality and what it means to do research with a spiritual focus) are not subsumed under one of these four, which are still seen as overly Western-oriented. Koitsiwe, writing from the context of South Africa, too suggests that "a new paradigm and epistemology in research is important because the global knowledge economy is based on new and diverse ways of generating and developing knowledge for sustainable livelihoods" (2013, p. 274). Furthermore, Wilson and Wilson, both from the Opaskwayak Cree Nation in Canada, indicate that "the highlight of our careers was to finally realize an initiative that reflected an Indigenous paradigm; one that honored relationships in all their many forms" (2013, p. 340). The inclusion of Indigenous paradigms in typologies about paradigms could create a space for further conversation between the big four and additional pathways, and would at least not subsume them within the transformative paradigm (unless proponents of "new pathways to research" are comfortable with this).

As far as boundaries between positions are concerned, I have noted in the article that while Mertens wishes to distinguish the transformative paradigm from, say, postpositivism and constructivism, she also recognizes that boundaries between paradigms may be permeable. This is especially insofar as proponents exhibit a propensity to communicate and

learn from one another. I have shown, for instance, that the transformative paradigm may benefit from appreciating the constructivist insistence that all that researchers can ever "find" are ways of constructing visions of realities. And constructivist-oriented authors can benefit from the axiological tenet that Mertens offers as a basis for deciding to which constructions researchers should feel allegiance to give more "voice". Meanwhile, Scott attempts to open a space for postpositivist-inclined researchers to communicate with more constructivist-oriented ones when she notes that:

> There are very few adherents to epistemologies of objective knowledge. Quantitative researchers are not naïve positivists. They acknowledge the role of social construction in measures and are wary of quantification being seen as the equivalent of scientific reasoning. They know better than most that "statistics can lie. (2010, p. 233)

Once postpositivist-inclined authors adopt this position, there is room for further discussion around the tenets and application of tenets of postpositivist- and constructivist-oriented paradigms (see also Romm, 2013). This would also concur with Smith's suggestion (1999, p. 137) that although positivism normally implies a view of researchers as "outsiders" who are not "implicated in the research scene", positivist-oriented researchers (examining variables) can blur the lines between apparently objective outsider research (where researchers assume a distance from the community) and insider research (where relationships with communities are intentionally built). In an Indigenous research agenda it is understood that involving members of communities in defining "measures" and in the analysis of results (rather than seeing results as objective displays of information) adds to the quality of the research process. What is important, she maintains, is that researchers learn the skills and reflexivities required to mediate and work with these insider/outsider dynamics (as she believes Indigenous research is especially geared to handle). In short, I suggest that appreciating "new" paradigms (new to Western-oriented typologies) without subsuming them under the "big four" is possible, as well as learning across (defined) boundaries, to enrich all our pathways into the variety of ways of responsibly practicing social research.

Ethical Statement This is to confirm that in the writing of this article I have complied with all ethical standards for the writing of a theoretical piece on, in this case, the transformative paradigm and how arguments connected with it can be developed and extended (including implications for practice). The article title is: Reviewing the Transformative Paradigm: A Critical Systemic and Relational (Indigenous) Lens

Conflict of interest The author has declared that there is no conflict of interest in this article.

References

Ali S (2010) Silence and secrets: Confidence in research. In: Ryan-Flood R, Gill R (eds) Secrecy and silence in the research process: feminist reflections. Routledge, London, pp 245–256

Bausch KC, Flanagan TR (2013) A confluence of third-phase science and dialogic design science. Syst Res Behav Sci 30:414–429

Bawden RJ (2011) Epistemic aspects of social ecological conflict. In: Wright D, Camden-Pratt C, Hill S (eds) Social ecology: applying ecological understanding to our lives and our planet. Hawthorne Press, Stroud, pp 52–63

Bishop EC, Shepherd ML (2011) Ethical reflections: examining reflexivity through the narrative paradigm. Qual Health Res 21(9):1283–1294

Chilisa B (2012) Indigenous research methodologies. Sage, London

Christakis AN (2004) Wisdom of the people. Syst Res Behav Sci 21(5):479–488

Christakis AN, Bausch KC (2006) Co-laboratories of democracy: how people harness their collective wisdom and power to construct the future. Information Age Publishing, Greenwich

Cram F, Chilisa B, Mertens DM (2013) The journey begins. In: Mertens DM, Cram F, Chilisa B (eds) Indigenous pathways into social research. Left Coast Press, Walnut Creek, pp 11–40

Creswell JW (2003) Research design: qualitative, quantitative, and mixed methods approaches, 2nd edn. Sage, Thousand Oaks

Davis J (1997) Alternate realities: how science shapes our vision of the world. Plenum, New York

De Zeeuw G (1996) Three phases of science: a methodological exploration. Working paper nr. 7. Centre for Systems and Information Sciences, University of Humberside, United Kingdom

Dick B (2014) Action research. In: Mills J, Birks M (eds) Qualitative methodology: a practical guide. Sage, London, pp 51–65

Dillard CB (2006) When the music changes, so should the dance: cultural and spiritual considerations in paradigm "proliferation". Int J Qual Stud Educ 19(1):59–76

Eser O (2014) Meaning in the vortex of intervention and translation with a focus on international diplomacy. Turkish Stud 9(6):379–387

Flanagan T, Christakis A (2010) The talking point: creating an environment for exploring complex meaning. Information Age Publishing, Charlotte

Flood RL (1990) Liberating systems theory. Plenum Press, New York

Flood RL (2001) The relationship of "systems thinking" to action research. In: Reason P, Bradbury H (eds) Handbook of action research: participative inquiry and practice. Sage, London, pp 133–144

Flood RL, Jackson MC (eds) (1991) Critical systems thinking: directed readings. Wiley, New York. 347 pp

Flood RL, Romm NRA (1996a) Revisiting plurality: diversity management and triple loop learning. Syst Pract 9(6):587–603

Flood RL, Romm NRA (1996b) Diversity management: triple loop learning. Wiley, Chichester

Goduka N (2012) Re-discovering indigenous knowledge—ulwaziLwemveli for strengthening sustainable livelihood opportunities within rural contexts in the Eastern Cape province. Indilinga—Afr J Indig Knowl Syst 11(1):1–19

Gregory WJ (1992) Critical systems thinking and pluralism: a new constellation. Doctoral dissertation, City University, London

Harris L-D, Wasilewski J (2004) Indigeneity, an alternative worldview: four R's (relationship, responsibility, reciprocity, redistribution) vs. two P's (power and profit): sharing the journey towards conscious evolution. Syst Res Behav Sci 21:489–503

Ivanov K (2011) Critical systems thinking and information technology. In: Haftor D, Mirijamdotter A (eds) Information and communication technologies, society and human beings: theory and framework. IGI Global, Hershey, pp 493–514

Koitsiwe M (2013) Prospects and challenges of becoming an Indigenous researcher. In: Mertens DM, Cram F, Chilisa B (eds) Indigenous pathways into social research. Left Coast Press, Walnut Creek, pp 261–275

Kovach M (2009) Indigenous methodologies: characteristics, conversations, and contexts. University of Toronto Press, Toronto

Kvale S (2002) The social construction of validity. In: Denzin NK, Lincoln YS (eds) The qualitative inquiry reader. Sage, Newbury Park, pp 299–325

Lather P (1986) Catalytic validity. Issues of validity in openly ideological research: between a rock and a soft place. Interchange 17(4):63–84

Lather P (1992) Critical frames in educational research: feminist and post-structural perspectives. Theory Pract 31(2):87–99

Lincoln YS, Guba EG (2003) Paradigmatic controversies, contradictions, and emerging confluences. In: Denzin NK, Lincoln YS (eds) The landscape of qualitative research, 2nd edn. Sage, Thousand Oaks, pp 253–291

Lincoln YS, Guba EG (2012) The constructivist credo. Left Coast Press, Walnut Creek

Mackenzie N, Knipe S (2006) Research dilemmas: paradigms, methods and methodology. Issues Educ Res 16(2):193–205. (Retrieved August 15 2014 at http://www.iier.org.au/iier16/mackenzie.html)

McIntyre-Mills JJ (2008) Systemic ethics: social, economic and environmental implications of eating our yellow cake in South Australia. Syst Res Behav Sci 25:225–248

McIntyre-Mills JJ (2014) Systemic ethics and non-anthropocentric stewardship. Springer, New York

McKay VI, Romm NRA (2008) Active research toward the addressal of HIV/AIDS in the informal economy in Zambia: recognition of complicity in unfolding situations. Action Res 6(2):149–170

Mertens DM (1999) Inclusive evaluation: implications of transformative theory for evaluation. Am J Eval 20(1):1–14

Mertens DM (2004) Research and evaluation methods in special education. Sage, Thousand Oaks

Mertens DM (2005) Research methods in education and psychology: integrating diversity with quantitative and qualitative approaches, 2nd edn. Sage, Thousand Oaks

Mertens DM (2007a) Transformative paradigm: mixed methods and social justice. J Mixed Methods Res 1(3):212–225

Mertens DM (2007b) Transformative considerations. Am J Eval 28:86–90

Mertens DM (2009) Transformative research and evaluation. The Guilford Press, New York

Mertens DM (2010a) Research and evaluation in education and psychology. Sage, Thousand Oaks

Mertens DM (2010b) Transformative mixed methods research. Qual Inquiry 16(6):469–474

Mertens DM (2012) Transformative mixed methods: addressing inequities. Am Behav Sci 56(6):802–813

Midgley G (1990) Creative methodology design. Systemist 12:108–113

Midgley G (1996) What is this thing called CST? In: Flood RL, Romm NRA (eds) Critical systems thinking: current research and practice. Plenum, New York, pp 11–24

Midgley G (2000) Systemic intervention: philosophy, methodology and practice. Kluwer Academic/Plenum, New York

Murove MF (2005) The theory of self-interest in modern economic discourse: a critical study in the light of African humanism and process philosophical anthropology. Doctoral thesis, University of South Africa

Romm NRA (1995) Knowing as intervention. Syst Pract 8(2):137–167

Romm NRA (1996) Systems methodologies and intervention: The issue of researcher responsibility. In: Flood RL, Romm NRA (eds) Critical systems thinking: current research and practice. Plenum, New York, pp 179–194

Romm NRA (2001a) Accountability in social research: issues and debates. Kluwer Academic/Plenum, New York

Romm NRA (2001b) Critical theoretical concerns in relation to development: Habermas, modernity, and democratization. In: Coetzee JK, Graaff J, Hendricks F, Wood G (eds) Development theory, policy, and practice. Oxford University Press, Cape Town, pp 141–153

Romm NRA (2002) A trusting constructivist approach to systemic inquiry. Syst Res Behav Sci 19(5):455–467

Romm NRA (2010) New racism: revisiting researcher accountabilities. Springer, New York

Romm NRA (2013) Employing questionnaires in terms of a constructivist epistemological stance: reconsidering researchers' involvement in the unfolding of social life. Int J Qual Methods 12:652–669

Romm NRA (2014) Active and accountable social inquiry: implications and examples. Particip Educ Res 1(2):13–20

Scott J (2010) Quantitative methods and gender inequalities. Int J Soc Res Methodol 13(3):223–236

Smith LT (1999) Decolonizing methodologies: research and Indigenous peoples. Zed Books, New York

Thayer-Bacon B (2003) Relational epistemologies. Peter Lang, New York

Wheeler JA (1982) Bohr, Einstein, and the strange lesson of the quantum. In: Elvee RQ (ed) Mind in nature. Harper and Row, New York, pp 1–30

Wilson S, Wilson A (2013) Neyo way in ik issi: A family practice of Indigenous research informed by land. In: Mertens DM, Cram F, Chilisa B (eds) Indigenous pathways into social research. Left Coast Press, Walnut Creek, pp 333–352