tion and planning can both support and enrich the subsequent “performance” experience while also hampering and obstructing it, depending upon the stance or intention that is brought forth to the act of preparation/planning.

I have also been involved in more conventional types of research projects in mathematics education (such as textual analysis of the CMP curriculum, a study on pre-service elementary teachers’ understandings around proportional reasoning, and a re-examination of the conceptual/procedural knowledge framework), but since I have little to no interest in them at this time, I have relegated them to the parentheses of this one sentence.

PARTICIPANT RESEARCH ESSAY
FOR DIME RESEARCH TEAM

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Whilst writing this brief paper, I am reminded of the view that this textual representation of the evolution of my research program is likely to remain incomplete because of the crisis-laden nature of dispassionate academic language (Granger, 2006). Thus, I give my personal (and professional) voice against such an academic language via narrative, poetic and visual genres to address (but not to fully resolve) the representational crisis. Written in the form of a letter to my possible readers, this paper presents a brief sketch of how my research program evolved in the last seven years. I begin by describing how I employed my lived experiences to unpack the problem of culturally decontextualized mathematics education in my Master’s project. Giving a preview of the research problem and research methodology, I illuminate some key features of my recently completed doctoral research. Toward the final section of this paper, I present my current research program together with research projects being undertaken by Masters and PhD students under my supervision.

Doubting the Golden Standards

After the completion of my first Master’s degree in 1998, I started my career as a mathematics teacher educator in a recently established university. During a period of three years, I interacted with teachers about their perceptions of the recently changed mathematics curriculum. Perhaps the change was understood to be very important by policymakers, curriculum designers and some university professors. However, for teachers it was just another fad with which to incorporate new topic areas into the syllabus without paying much attention to ways that can make mathematics meaningful, culturally contextualized and life-affirming. In hindsight, I could see teachers demanding a more reality-based image of mathematics, whereas the experts’ image of mathematics could be close to the hegemonic nature of mathematics as a body of decontextualized knowledge. Being puzzled by such a contradiction, I questioned to myself: Can there be any research methods that enable me to undertake an inquiry into the problem of culturally decontextualized mathematics education? It was due to such a contradictory situation that I began to suspect the usefulness of positivistic research model (a priori, fixed research design, unresponsive to context (Luitel, 2009b) in responding to emergent problems of mathematics education. Nevertheless, I was not aware of the epistemic possibilities I could bring to bear for
inquiring into several unique and contextual issues, such as the problem of culturally contextualized mathematics education faced by Nepali students.

Transgressing the Conformist Tradition
I hope that you are enjoying my research (hi) story. At the beginning of 2002, I got an opportunity to pursue a Master of Science in mathematics education in an overseas university. A substantial emphasis on reflective writing as a significant component of M Sc courses made me aware of the use of non-positivistic approaches to teaching and learning. In the subsequent year, I started conducting an inquiry into the problem of culturally decontextualized mathematics education in Nepal, a problem I encountered since the beginning of my formal education (Luitel, 2009b). The initial basis for selecting the problem of my research was my lived experiences as a learner, teacher and teacher educator.

A number of epistemic referents, such as radical constructivism, hermeneutical-phenomenology and arts-based research enabled (and have been enabling) me to unpack my lived experiences from multiple vantage points. Radical constructivism offered me three key broad philosophical perspectives: a) that reality is a matter of perpetual reconstruction by the researcher; b) that the researcher needs an awareness of multiple possibilities of knowing; and c) that research is an active, adaptive and creative process rather than a task of procedural exacting (von Glasersfeld, 1995). With the help of hermeneutical-phenomenology, I employed a number of quality standards including pedagogical thoughtfulness that encourage readers to examine their unexamined pedagogical beliefs by asking these types of questions: What guides me in formulating my pedagogies? What are my pedagogical beliefs and assumptions (van Manen, 1991)?

An arts-based approach to research enabled me to represent the tales of my lived experiences as a mathematics learner and teacher (Greene, 1995; van Manen, 1988). More
so, John van Maanen’s discussions of realist, confessional and impressionist tales helped reconstruct my memories via reflective, storied, dramatic and poetic genres (see the boxed poem: Let Me Declare!). I employed strategies of narrative construction, phenomenological writing and reflective interpretation so as to unpack the notion of culturally decontextualized mathematics education in Nepal. Because our past lived experiences cannot be fully accessible in a purist sense, and because it is always affected by our present vantage points, I chose to use the notion of narrative construction as a basis for representing my lived experiences of different nodal moments of my life (Barone, 2006). Guided by the principle of self-conscious writing, I used reflective interpretation as opposed to dispassionate and cold interpretive approaches so as to unpack my lived experiences of encountering culturally decontextualized mathematics education in Nepal.

**Reaching Out to the Field**

After completing my Master’s project at the end of 2003, I returned to Nepal with a vision of continuing my recently invented research approach. Apart from some short-term programs, Kathmandu University did not have any academic programs in mathematics education. I took initiatives for starting a one-year Post-Graduate Diploma in Education for secondary mathematics teachers. Similarly, I played an active role for launching an M Ed in mathematics education. In this process, I confronted a number of vexing questions (e.g., What is the key purpose of mathematics teacher education programs? Whose interests is being well-served by a mathematics education program?), which I had raised (and addressed to some degree) in my Master’s project.
I continued my research program by publishing papers (Luitel, 2007; Luitel & Taylor, 2005, Luitel & Taylor, 2006; Luitel & Taylor, 2007) out of my Master’s research project and co-supervising M Phil dissertations (e.g., Belbase, 2006). These papers depict how lived experiences help generate critiques (and ‘multi-perspective’ analyses thereof) of the hitherto problem of culturally decontextualized mathematics education in Nepal. In these papers, I (together with my mentor, Peter Taylor) continued to explore and use a number of theoretical referents – cultural studies, curriculum metaphors and critical mathematics education, to name a few – so as to flesh out different components (e.g., curricular, pedagogical, assessment-related) of culturally contextualized mathematics education. The poem presented as boxed text demonstrates a form of pedagogical ‘de-contextualization’ prevailing in the field of mathematics education. It was through the process of writing these papers that I was able to extend the scope of my epistemology to co-generative inquiry (Roth & Tobin, 2001), social constructionism (Gergen, 1995) and dialectical thinking (Wong, 2006).

**My Doctoral Research: Adding up New Dimensions of Transgression**

Let me share some key facets of the journey of my doctoral research. I started my doctoral research in mid-2006 with an aim of continuing an inquiry into the problem of culturally decontextualized mathematics education in Nepal. I generated initial research questions on the basis of my history as a student of primary, secondary and university levels of education in Nepal, my Master’s research project, and professional experiences as a teacher educator working in a university of Nepal between 2004 and 2006. Through an autobiographical excavation of my experiences of culturally decontextualized mathematics education, I came up with several emergent research questions, leading to six key themes of this inquiry: (i) hegemony of the unidimensional nature of mathematics as a body of pure knowledge, (ii) unhelpful dualisms in mathematics education, (iii) disempowering reductionisms in curricular and pedagogical aspects, (iv) narrowly conceived ‘logics’ that do not account for meaningful ‘life-world’-oriented thinking in mathematics teaching and learning, (v) uncritical attitudes towards the image of curriculum as a thing or object, and (vi) narrowly conceived notions of globalization, foundationalism and mathematical language that give rise to a decontextualized mathematics teacher education program. Indeed, the key aim of my research was to develop a number of helpful heuristics needed to transform mathematics education from a culturally decontextualized subject to an inclusive, meaningful and life-affirming learning enterprise.

I chose a multi-paradigmatic design space comprising mainly the paradigms of ‘Criticalism’, ‘Interpretivism’ and Postmodernism (Taylor, Settelmaier, & Luitel, in press; Willis, 2007). The paradigm of ‘Criticalism’ enabled me to examine my lived experiences from the vantage point of historical realism, portrayal of absences and critical selfhood. Rather than choosing exclusively the unidimensional metaphor of ‘Criticalism’ as finger-pointing to others, I equally paid attention to inward criticality which cautions researcher beware of his/her taken-for-granted (and false) consciousness(es) (Kincheloe, 2006). ‘Interpretivism’ enabled me to embrace emer-

An 18th century old overcoat
Everybody tries to wear
But fits nobody
***

_I am creating a cozy one_
_That I can wear comfortably_
_That feels like my real coat_
_That helps show my ‘undistorted’ selves_

*(Luitel, 2009a, p. 329 emphasis added)*

Auto/Ethnography

Self ----------------------------

Autobiography Ethnography
gent research design that could help account for emergent understanding through hermeneutical, phenomenological and other interpretive sensibilities. Choosing the constructive aspect of Postmodernism (cf. deconstructive postmodernism), I employed its feature of epistemic pluralism in which each type of ‘knowledge’ has the same epistemic status as every other type of knowledge, thereby cultivating differences between individuals, contexts and events. One of the benefits of promoting ‘difference’ is to challenge the one-size-fits-all formalism of positivism. Unlike the ‘impersonalization’ of research texts in the positivist paradigm, the postmodern paradigm celebrates personalized views, thereby promoting creative-subversive views about issues under study.

I employed two methodological heuristics, auto-ethnography and ‘small p’ philosophical inquiry, so as to examine different aspects of culturally decontextualized mathematics education and construct visions of making mathematics education in Nepal a meaningful, ‘agentic’, innovative and inclusive learning enterprise. Specifically, I used auto-ethnography as a method (which helped examine self-culture dialectics) and auto-ethnography as texts (which promoted performativity, dialogism and pedagogical enablement). In so doing, I tried to resolve (at least for my research) the ongoing debate between evocative versus analytical auto-ethnography, for notions of evocative (which is less analytical) and analytical (which is less evocative) co-exist side-by-side.

In my doctoral research, personal practical knowing and personal-experiential seeking were key orientating bases for the method of small p philosophical inquiry. As a personal practical knower my focus was on making better sense of my practice, whereas as a personal-experiential seeker I tried to be more than just a sense maker: I strived to develop visions of possibilities. More so, I chose small p philosophical inquiry to distinguish it from (capital P) Philosophical Inquiry,¹ which seemed to privilege absolute Idea (and Theoretical View of Rationality (Rorty, 1982)) over personal-experiential ideas arising from my personal and professional life-worlds (Greene, 1997).² Nevertheless, this does not mean that small p philosophical inquiry is dismissive of capital P Philosophies (or capital T Theories); rather it is likely to make a non-dualistic (i.e. inclusive of non-dualistic and helpful dualistic categories) shift from a dualistic imposition of capital P Philosophies over practitioners’ local wisdoms and ideas.

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¹ Generally Philosophical Inquiry is considered to be analytical and theoretical analysis sans experiential evidence. More so it is also regarded as an analytical pursuit where the notion of analytic is conceived to promote dualities of reason versus evidence, rational versus practical, Ideas versus ideas, to name a few (Feinberg, 2005)

² I quote Maxine Greene for small p philosophical inquiry because she argues for the primacy of the researcher’s experiences over absolute philosophical foretelling.

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Aftermath of a big quake
Person 1 asks,
Was the foundation not strong enough?
Person 2 says,
Foundation was too strong and rigid
Person 3 opines,
A flexible foundation could minimize the damage
(Luitel, 2009a, p.343)
You may be wondering how I used different quality standards (cf. validities) by which to judge the quality of the product and process of my inquiry. I employed a post/foundational perspective (see the adjoining poetic box) in conceiving and employing these quality standards. The standard of incisiveness puts emphasis on the extent to which my research problems are articulated clearly in terms of the key research problem (Barone, 2007). The standard of illuminating asks this question to readers of my thesis: ‘Are meanings of concepts, ideas and phenomena under study enriched, deepened, made vivid, and made more complex?’ Similarly, I chose wisdom as yet another quality standard with an emphasis on going beyond unhelpful dualisms associated with knowledge claims (Henderson & Kesson, 2004; Maxwell, 2006). Arising from the integral paradigm, this standard helped me become less presumptive and inclusive of adversaries associated with issues under study (Wilber, 2007).

My doctoral research can be discussed in terms of two key outcomes, but not limited to: (a) illuminating presentations of visions of the multi-dimensional nature of mathematics as im/pure knowledge system that promotes culturally contextualized mathematics education in Nepal, and (b) exemplary uses of innovative research methods useful for investigating issues and problems otherwise unaccounted for by conventional research methodologies (i.e., confirmatory, a priori, positivistic). Our recent publications on mathematics teacher education (Luitel & Taylor, 2009, 2010) coalesces some glimpses of such a vision. Although these publications briefly demonstrate the nature of my research methodology, a number of papers are underway to articulate the complementary and supplementary nature of auto-ethnography and small p philosophical inquiry which is an historical extension of my previous methodologies (e.g., Luitel & Taylor, 2007, Luitel, 2007). A key hallmark of my methodology is to enable researchers (mathematics teachers and teacher educators) to employ their lived experiences so as to radically envision their present and future professional landscapes to be inclusive, fair, empowering and justice-oriented. In my experience thus far, the hitherto dominant ‘hypothetico-deductive’ logic and genres are insufficient to carry out the double task of analyzing (sic) and envisioning. Therefore, I employed a number of new logics and genres to represent ‘rival and complementary explanations’ of phenomenon under study.

Please bear with me until I describe different forms of logic(s) and genres that I used in my research. Dialectical logic allowed me to hold contradictions together in creative tension so that, for example, mathematics as a body of pure knowledge and mathematics as impure knowledge system can be given equal consideration without one denying the legitimacy of the other, just as the concept of light does not make sense without the concept of darkness (Luitel & Taylor, 2010). In this paper, I have used ‘/’ symbol to signify a dialectical relationship. Metaphorical logic is helpful for promoting open and embodied inquiry for exploring multiple facets of knowledge and knowing (Lakoff & Johnson, 1999). Metaphorical logic enabled me to engage in multi-schema envisioning, using elastic correspondence between conflicting schemas, in order to capture the complexity of a phenomenon. I used narrative logic to promote thinking grounded in everyday life-worlds (David, 2006). As a key characteristic of narrative logic, I employed a diachronic vision so as to make events intelligible in relation to what transpired in the process of my inquiry. Poetic logic enabled me to represent non-real, envisioned, and atypical reality arising from my lived experiences. If you go through my thesis, you can find how poetic logic has helped me introduce nonlinearity, silence, emergence, melody and meter (Leggo, 2008), thus contributing to a holistic understanding of the notion of culturally decontextualized nature of mathematics education in Nepal.
With the help of narrative genres, I spoke from a lived storied perspective bringing contexts, events and people to the textual space, thereby depicting richly the complexity of my lived experiences. Many Nepalese cultures bring forth storytelling traditions as a means of knowledge generation, depiction and transmission. Thus I used my natal culture as a referent for structuring narratives to communicate research outcomes, articulating a number of moral tales arising from my experience of culturally decontextualized mathematics education. Through the use of poetic genres, I have represented aesthetic-imaginative aspects of my knowledge claims through meter, rhythm, rhyme and playfulness (Christie, 1979). Within Eastern wisdom traditions there is a millennia-old truism that poetic eyes can reach further than the sun’s rays. More so, I have used poetic genres to evoke emotional, aesthetic, spiritual and interpretive responses from the readers.

By employing ‘performative’ genres, I constructed my thesis chapters as sequels of multi-voiced dialogue to stimulate transformative learning amongst an audience. A hallmark of ‘performative’ research texts is that they are dialogic, embracing open and praxis-oriented, thereby providing an interactive space for the audience (Saldaña, 2008). Employing non-linguistic genres - photographs, cartoons, and creative models; I tried to represent knowledge claims otherwise unaccounted for by linguistic genres (Sullivan, 2008). Specifically, I used such genres to represent particulars, peculiarities and extraordinariness otherwise neglected in the ‘mediative’ process of linguistic ‘textuality’. With the view that cultivation of visual imagination can bring clarity to the articulation of knowledge claims, I juxtaposed linguistic and non-linguistic genres to foster pedagogical thoughtfulness in the reader/viewer (van Manen, 1991).

My Research Program: Making, Breaking and Sustaining New Traditions
Given this background, I have been developing my research program under the theme of transformative educational research (TER). The notion of transformation entails a radical departure from assimilated, taken-for-granted and unexamined beliefs and actions (Luiket, 2009a; Mezirow, 2005). I envisage that TER is a perpetual need for teachers and teacher educators who, by critically examining their pedagogical values, beliefs and actions, can use TER as/or their professional development. For example, one of my students has proposed to examine his long-held assumptions about the nature of mathematics and its impact on his learning. Unpacking his lived experiences as a learner, the researcher aims to envision an empowering nature of mathematics that would offer him meaningful learning experiences, and that can be a helpful referent for his present and future teaching of mathematics. Another M Ed student is investigating his journey of transformation from a punishment-friendly teacher to a caring, loving and empathic mathematics teacher. The student shares his lived experiences that this shift is not always straightforward as he encounters contradictions between his ‘old’ and ‘new’ modes of thinking and acting in pedagogical contexts. Similarly, in a recently completed M Ed dissertation examined by an international expert of transformative education, the researcher expresses a commitment of transformation from the male-centric, disempowering and exclusive culture of mathematics education to an inclusive, empathic and caring one.

Another important feature of my research program is the promotion of an active view of research methodology, because any methodological categories and labels become cliché-like with-
out a dynamic process of renewal. Having multi-paradigmatic design space at our disposal, the research group is enabled to go beyond ‘methodolatry’, for an uncritical use of (anything including) methodology is likely to direct researchers toward the ‘tunnel of darkness’ (Muller, 1955). How can this be done? One way of doing this is to employ critical reflexivity which enables researchers to beware of limitations inherent in each and every aspect of their research. The notion of critical reflexivity helps researchers to monitor, make visible and critique subjectivities and distorted perspectives that they have developed over a period of lifetime. Another way of addressing ‘methodolatry’ is to facilitate researchers to be conscious of their agency as meaning-makers, for they do not only fit their lived experiences in the pre-specified methodology but are enabled also to be cognizant of limitations embedded in their methodological frame.

Last but not the least, another hallmark of my research program involves the search for creative ways to represent knowledge claims. For us, the conventional five-chapter master plan is not the only way. Rather it is only a way out of many! Such a creative and ‘agentic’ undertaking opens up possibilities for using multiple genres and logics, which enable researchers to liberate from the false consciousness that educational research should employ only ‘hypothetico-deductive’ logic, and that impersonalized and linear writing is the only method of representing knowledge claims. For example, an M Ed student, whose dissertation was examined by a professor from overseas, has presented his dissertation in the form of reader’s theatre (Donmoyer & Donmoyer, 2008). Similarly, an M A student is about to complete her proposal on values education with an emphasis on multiple genres and logics (e.g., poetic, dialectical, storied and reflective) to be employed in her research.

Above all, the following thesis/dissertation titles depict the nature and focus of my research program.

1. Exploring a motherly nature of mathematics: An auto-ethnographic inquiry (M Ed; External examination done by an international expert).
2. ‘Teaching’ mathematics: A shift in terms of applying participatory pedagogies (M Ed; External examination done by an international expert).
3. An auto-ethnography into values education (MA; Proposal preparation underway).
4. Transformational shift in mathematics teaching: Unpacking lived and living realities (M Ed; Proposal preparation underway).
5. Becoming a ‘good’ mathematics learner (M Ed; Proposal preparation underway).
6. Who has math anxiety, me and/or my students? (M Ed; Proposal preparation underway).
7. Subalterns, elites and literacies: Lived experiences of Tharu women (M Phil; Research underway).
8. Participation in politics: Living and lived experiences of women (M Phil; Research underway).
9. Reflective practices for transformative learning (M Phil; Research underway).

References


