Critiquing situatedness: An integrated approach to improving a researcher's practice

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This paper focuses on some methodological aspects of an ongoing Master's degree project that builds upon the researcher's autobiographical experiences of ethnographic moments. Informed by the recent construct of teacher education that research should improve educative practices of the researcher, the methodological edifice embodies alternative and multiple approaches to self study research by using multiple genres of writing - narrative, fictional storied, poetic and reflective representations - in order to represent the researcher's experiences as a mathematics student, teacher and teacher educator in Nepal. Blending van Manen's criteria of representing texts - orientation, strength, richness, and depth - for invoking readers with pedagogical thoughtfulness within auto-ethnographic texts that critique the situatedness of the researcher, the bricolage metaphor is central to the inquiry.

Introduction

In this paper, I (Bal Chandra Luitel) discuss the use of multiple autoethnographic genres for a self-study research. Informed by the recent notion that educational research should improve the practice of the researcher (Bosher, 2002), the first part of this paper deals with my research questions. Second, I elucidate my standpoint on epistemology, ontology and phenomenology in relation to the ongoing inquiry. Third, I briefly introduce the research method, especially, the notion of autoethnography in the context of my research. Fourth, discussing four textual criteria, I elaborate the genres of representation and four criteria for judging the quality of texts that are essential for creating pedagogical thoughtfulness and wakefulness. Finally, I discuss the 'triple crises' of qualitative research in order to address the issue of rigour in my research.

The research questions

Since my primary education, I constructed the image of mathematics as a foreign subject. In my experience, this image restrained (and facilitated) my learning in many ways. As a mathematics teacher, I faced a dilemma of teaching against my culture. Being a teacher educator, I was confronted by several dilemmas on curriculum issues, such as local language versus national language, curriculum as currere versus curriculum as discrete concepts (Schubert, 1988), and so forth.

Given this, I chose to focus on the problem of the cultural relevance of school mathematics curricula in Nepal. Experiencing major dislocations between the culture of mathematics and my Nepalese cultural contexts has shaped my interests in this area. Specifically, my experiences include the issues of language incommensurability, decontextualised subject matter and the culture-inappropriate nature of mathematics. Exploring this problem and surveying my educative history have progressed together during this inquiry. Embracing Slattery's (1995) notion of (re)conceptualising curriculum from one's educational history, I started highlighting selected nodal moments that seemed to have restrained and facilitated my learning process.

Illuminated by Clandinin and Connelly's (2000) notion that narrative research questions need to be developed in accordance with what (context and subject), how (methods-genres of writing) and why (significance and justification), my inquiry process is being built upon the following three questions which are being refined as the inquiry advances.

1. To what extent do the school mathematics curricula of Nepal incorporate Nepali contexts within the subject
2. To what extent do the Nepali mathematics teachers embed Nepali contexts in their teaching practices?
3. What does the image of school mathematics curricula look like, in accordance with various curriculum metaphors?

Diagram 1: The self-study contexts

**Epistemological, ontological and phenomenological assumptions**

The study has been built on nominalist ontological assumptions. Specifically, I hold the view that the notion of the *objective world* is due to one's observational and theoretical standpoint for explaining the nature of reality. Inductively, to depict reality as *out there* and unchangeable is to promote a one-sided theoretical and observational standpoint. Consequently, my epistemological beliefs have been formed according to the notions of a *postmodern constructivist standpoint*, which describes the nature of knowledge as soft, tangible, spiritual, subjective and so forth. Having subscribed to the notion of postmodern constructivism, the proposed research is being grounded upon the notion of representing multiple subjectivities in order to communicate the subtle, tacit and subjective nature of knowledge with readers. In essence, the proposed research will follow epistemological pluralism, namely multiple forms of constructivism.

The notion of phenomenology deals with the study of the development of human consciousness and self-awareness within the frame of observed phenomena (Gubrium & Holstein, 2000). In the context of educational research, phenomenology implies examining the lived experiences of pedagogical contexts (van Manen, 1990). Furthermore, van Manen (1990) discloses that the notions of phenomenology are to deal with soft, soulful, subtle and sensitive lived experiences, and to bring them to our reflective awareness. Similarly, Geelan and Taylor (2001) have described that *their* lived experiences help them to form a canvas to portray the portrait of science and mathematics teachers. Clandinin and Connelly's (2000) emphasis is on the reflection of educative experiences for improving the practice of teachers and educators. Illuminated with these standpoints, I have considered the value-laden, context-oriented, and subjective portrayal of the educative phenomena, which are the sources of my lived experiences.

**The research method**

I have been following an autoethnographic method of inquiry. Etymologically, the term autoethnography comprises three different words, *auto, ethno* and *graphy*, which signify the textual representations of one's personal experiences in his/her cultural context. Autoethnographic inquiry subscribes to the *nomolthic* world view that reacts radically against the realist agenda of ethnography. Spry (2001) enunciates that autoethnography is the connection between the autobiographic impulses and ethnographic moments, and it can be depicted as "self narratives that critique the
situatedness of self with others in social contexts” (p. 710). According to Reed-Danahay (cited in Spry, 2001), autoethnography signifies both the text and the methods of representation of diverse interdisciplinary praxes. Viewed from the perspective of Ellis and Bochner (2000), autoethnography focuses a wide angle lens to deconstruct the meaning of the context by embedding feelings, emotions, concrete action, dialogue, embodiment, spirituality and self-consciousness. Furthermore, autoethnography looks from the inside of the personal experience, and connects the inquirer with his her cultural contexts. Interestingly, autoethnographic writing can be depicted by the metaphor of a camera (Ellis & Bochner, 2000) which focuses on the rarely heard stories (van Maanen, 1988), zooming inward and outward, backward and forward, from one dimension to multiple dimensions. In closing this brief introduction of the research method, I discuss specific issues of the inquiry process.

Writing as inquiry

Criteria: Unlike scientific research, which regards writing as an add-on activity, self-study research has subscribed to the notion of writing as inquiry. Commonly speaking, writing is the central activity of any autoethnographic inquiry. Furthermore, the purpose of the autoethnography (cf. autobiography) is to provide the reader with richer, depthful, strong and oriented textuality in order to communicate and provoke the reader for intended pedagogical thoughtfulness. Considering these issues, I will take into account van Manen's (1990) notion of writing lived experiences for creating dialogic relationships between the author and the readers. Furthermore, I will put an emphasis on creating pedagogically thoughtful text by considering the following four criteria as discussed by van Manen (1990) and Geelan and Taylor (2001).

- **Orientation:** The meaning of orientation is to focus on the research question from the perspective of the lived experience of the researcher. It also indicates that the researchers need to view self and others' lives from pedagogical perspectives. In the present research, I clarify my standpoint in relation to issues of culturally relevant curriculum.

- **Strength:** The strength of my text is reflected in the degree of pedagogic interpretation of a certain phenomenon. The criterion of strength is the degree to which the text creates a pedagogically dialogic relation with the intended readers.

- **Richness:** Unlike the reduced form of textual representation, thick description of phenomena is considered appropriate for representing lived experiences. Specifically, the uniqueness and irreplaceable nature of stories and narrative genres of writing can embrace the multiplicity and richness of phenomena.

- **Depth:** Depth is related to the explanatory dimensions of the phenomenon. Depicting a phenomenon in texts may not be depthful unless it uncovers the multilayered nature of lived experiences and its profound meaning within a pedagogical context. Furthermore, the textuality should be capable of connecting the readers' experience with their pedagogical context.

Types of reflection: My understanding of reflection on my lived experience is "a thoughtful, reflective grasping of what it is that renders this or that particular experience its special significance" (van Manen, 1990, p. 32). The reflection of self and the social contexts is essentially important in the research, which includes personal narratives. According to Schon (1983), reflection on-action is to look at my educational history to appraise my action in a particular context. Afonso (2002) used three types of reflection suggested by Willis (cited in Afonso, 2002): contextual reflection, dispositional reflection and experiential reflection. Linking Connelly and Clandinin's (2000) three-space dimensions, Schon's (1983) reflection on-action and van Manen's (1990) reflective lived experiences with Willis' (cited in Afonso, 2000) three types of reflection, I am considering them - contextual reflection, dispositional reflection and experiential reflection - as referents for my writing.

Nevertheless, an absolute distinction between these types of reflection is difficult. Generally, contextual and dispositional types of reflection are embedded within experiential reflections. Considering van Manen's (1990) notion of lived experience and reflectivity, the third is most powerful in creating pedagogical thoughtfulness, as he clarifies, "To conduct a personal description of a lived experience as much as possible in experiential terms, focusing on a particular situation of events" (p. 54). Furthermore, Clandinin and Connelly's (2000) focus on evoking pedagogical
Wakefulness by reflecting upon the narrator's experience gives more focus on experiential reflection. In essence, I use three types of reflection to critique my experience of situatedness in the educative contexts considered for the study.

**Multiple textuality and bricolage**

The notion of research as reading and writing is different from research as collecting and analysing data. The latter deals with the notion of research as a process of task reduction while the former focuses on the extensive and emergent nature of the research. My inquiry is being constructed under the notion that explanatory, interpretive and multiply-depicted "text cannot be summarised. To present research by way of reflective text is not to present findings, but to do a reading of a text that shows what it teaches." (van Manen, p. 153). As a researcher, I subscribe to the standpoint of epistemological pluralism which allows me to interpret my experiences from different perspectives. In performing the research as writing I subscribe to both writing styles, canonical and casual, in order to engage the readers. The research 'report' is a pieced-together bricolage comprising multiple genres of writing (Denzin & Lincoln, 2000). In the context of qualitative research, the bricolage metaphor depicts the interdisciplinary nature of the process and product of the research. Inductively, my autoethnographic bricolage comprises four types of textual representation:

1. fictional, storied and impressionistic writing
2. poetic writing
3. autobiographic writing; and
4. reflective commentary.

**Fictional storied and impressionistic writing:** The use of fictional stories is to elaborate contexts. van Maanen (1988) suggests that impressionistic writing will enrich textual representation focusing on characterisation and dramatic control. The following stories, titled 'I Have No Language' and 'Definition of Triangle', depict some classroom contexts of my primary school and secondary school, respectively.

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'I Have No Language'

"Repeat it," commanded the head teacher. Sukra repeated the word "sristi"[1] many times but could not pronounce it correctly. The head teacher warned him that he would fail in the oral test. His face became dark. He repeatedly told the teacher that his tongue was very bad so that he could not speak the Nepal language properly.

It could be any of the weekdays of October 1981. My brother [a teacher of the school] and the headteacher both appeared in our classroom. We became silent and motionless as statues. Both teachers were moderately kind persons. However, if we made any mistakes, the head teacher would lose his temper. My brother did not use to show an angry face, however, many students were aware of his unique and funny way of punishing students - putting a small pencil between two fingers and pressing from both sides. On that day, they asked each of us to pronounce correctly Nepali words and number names.

As Sukra could not pronounce many Nepali words, they asked him to pronounce some number names. However, he could not do this either. It could be inferred that Sukra was a mature student. He was tall and fat. I had noticed that students from the Rai[2] community found it difficult to pronounce many Nepali words.

By the end of the class, both teachers asked these 'problem students' to go outside and practice the words many times. They had been labelled as 'outsiders'. The process of testing students' tongue went on continuously until only five students out of thirty-five remained as 'insiders'. After a while, both teachers disappeared from the scene as if they had completed their drama.

We noticed that the outsiders were assigned to read some lessons very loudly so that their tongue could be improved enough for Nepali language. I could guess that some of them were reading a story and others were drilling multiplication tables and number names. Being insiders was a mix of pride and
glumness: our tongue was good for Nepali language but we had to complete two sets of exercises before the next break.

The problem students stayed outside before coming back into the classroom. We mixed together again. Sukra came to my place and asked about the mathematics exercises. I laughed at him because he could not speak properly, though he was bigger than me. "Don't laugh, Balchandra," he continued, "Show me your mathematics exercises." I used to show him my completed exercises because he used to bring his farm-grown fruits for me. Implicitly, there we had a reciprocal relationship: I used to help him do mathematics and he used to give me fruits.

"Can you say 'ekkais'[3]?," I goaded him. I was trying to entertain myself with his funny style of speaking.

"Why do you tease me?", he continued, "I cannot speak properly. It is not my language. It is the Chhetri-Bahun's[4] language."

"Really? What is your language?", I asked.

"We are Rai people. We have our own language. However, I cannot speak my language nor can my parents. Now I cannot speak Nepali. I have no language."

After his confession I could not ask any more questions. My small brain was trying to make sense of his last sentence - I have no language.

Diagram 2: Nepali cultural artefacts: Bell* and Shanai**

*I have used Nepali Bell as a cultural tool to depict a cultural tool in mathematical teaching.

**A Nepali musical instrument resembles pseudosphere.

'Definition of Triangle'

"Why didn't you complete your homework? You pathetic...I know how to treat you. Oh...I forgot my stick..." I was stunned and tried to check whether I had completed my homework. The flat-long-moustache-faced person with a non-ironed suit and typical discoloured Nepali cap entered the fourth grader's classroom again. I could not make eye contact with Mr. Giant who was our opponent-and-umpire for the whole year's game. What a pity! We were a group of helpless opponents! He went directly to the small boy who had not been able to complete 'math homework'. The boy's face was already full of fear. He was silently saying that he could not understand the problem. However, Mr. Giant was too big to listen to the small boy's plea. A few days ago, the same boy was on Mr. Giant's blacklist, and was threatened several times by Mr. Giant who had said, "If you follow me, you will pass the test and become a good person otherwise you will remain a cowboy." At that moment, I looked at the boy whose head was shaking back and forth. However Mr. Giant's standard Nepali was too difficult to understand for that small boy.

In the Giant-dom, there was no place for our voices. Our quiet voices used to disappear in the kingdom of his mathematics. The definitions were his powerful weapons to contain our positions. The bookish
problems were sacred texts and the process ritual was central. I had narrowly escaped from Mr. Giant's would-be punishments. Perhaps there were very few students who were still at large from his summons.

"If you tell me the definition of triangle, I won't punish you," Mr. Giant offered.

"A triangle is a figure with three sides and thee angles," was the boy's answer.

"Your definition is not complete. I will give you one chance." Mr. Giant's moustache seemed to be shaking. However, the boy could not make it. He was so nervous about being punished.

"Now you have to go to the front door, and touch the left corner and then return here. Remember you have to walk on your knees. It will help you to remember a triangle as a 'closed' figure enclosed by three sides".

The small boy completed his 'job' with wounds to his two knees. However, I did not know whether he could insert the missing word 'closed' in his definition.

**Poetic writing:** The purposes and uses of poetic representation are to bring to the fore the multilayered meaning of events and contexts. For instance, the following poem (spoken in a rap musical rhythm) portrays my perception of algebra in my primary and early lower secondary classes.

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'Algebra and Me'

new mathematics/
but meaningless/
very few numbers/
but were useless/

x, y, z /
in place of one, two, three/
variable and constant/
someone's patent/
neither me nor mine/
neither we nor ours/
either they or theirs/

algebra/
on the wooden chalkboards/
in the books/
in our assignments/
searching for belongingness/
variably continues/
constantly accelerates/
but it arrives/
somewhere/
on an unidentified place/

'like' and 'unlike terms'/
unlike the numbers/
would be practical/
pairing same-sized shoes/
but 'hands on' were absent/
easier was monomial/
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deadly binomial/
more unknowns in trinomial/
more 'pluses' and 'minuses' in multinomial/

addition as collecting/
combining/
subtraction as deleting/
taking away/
but adding '2a' and 'b'/
either 2ab or 2(a + b) or 2a + b/
taking away b from 2a/
an imagination beyond any basis/

**Autobiographic writing:** I am using autobiographic writing to depict selected nodal events. Specifically, the autobiographical representation depicts my experiences of the events and provides space for weaving other types of textual representation. Here is an example of autobiographic writing set in the context of my *Intermediate of Education* course.

### 'Episode 6'

It could be July/August of 1990. By then [after the democratisation of Nepal], Mr Scorn had changed his earlier metaphor of teaching from one-way-talking to dictation. That was a little better because we were able to have a record of what we studied on a particular day. However, most of the definitions and problem solving techniques hardly made any sense to me. Once, when Mr Scorn was solving a problem related to the centroid of a triangle, Mohan asked, "Excuse me sir, what does the term centroid actually mean? Is there any Nepali word for it?" Mr Scorn could not say then that Mohan had to leave the mathematics group. [In the beginning of the course, Mr Scorn used to say frequently that we did not have sufficient background knowledge to be in the mathematics group. So it would be better for us to select other subjects than mathematics.]

"You need to memorise every definition, formula and problem solving style I have written for you", replied Mr Scorn.

Mr Scorn's answer entered my ear as an arrow.

Mohan had tried to indicate that he did not understand the definition of centroid. He had asked the teacher to explain what centroid is. However, Mr Scorn simply generalised that we had to memorise the definitions so that we can understand better.

"But our psychology teacher says understanding of learning can be improved by meaningful learning. If you explain in Nepali we can make sense of it", said another student.

"Mathematics and psychology cannot go together. You need to know the formulas and definitions otherwise how would you pass the test?"

Mr Scorn covered his earlier stance by bringing in the term "test".

Mr Scorn's thick lips were moving: " I don't have any idea that centroid can be explained in Nepali. He then put on another mask and said, "Perhaps you need to improve your English so that you can understand mathematics." In the meantime I remembered one of my English teacher's comments on Mr Scorn's dictated notes: that many of the sentences did not make sense to him either. Then he commented that Mathematics English is very different from common English.

(From the autobiographic vignette titled 'We Have The Power...')
Reflective writing: The following is a section of reflective commentary on the story titled 'Definition of Triangle'. The main purpose of commentary writing is to reflect upon my situatedness, my disposition of mathematics learning and my experiences of learning mathematics.

The story titled 'definition of triangle' represents my fourth and fifth grade experience as a mathematics learner. I had developed the notion of geometry as a collection of definitions, facts and so forth. I still remember that I had memorised the point as a geometric shape without any length, breadth and thickness. However, I had experienced the problem that this definition could not help find the endpoints of a line segment. Similarly, in the case of angle measurement, I could not make any sense of why zero degrees and two right angles were on the same side of the protractor. In retrospect, the teacher could have used his arm to represent different types of angles. Even a paper-made fan could be a hands-on experience for us to identify and differentiate smaller and larger angles, as Magina and Hoyles (1997) suggested: "to carry out certain widespread cultural practices" (p. 114) in order to improve spatial concepts of children.

My criteria of rigour: Addressing the 'Triple crisis'

Because the underpinning epistemology of my research is based on postmodern constructivism, the conventional criteria of rigour are not appropriate. For me, the concept of 'external validity' entails the notion of generalisability of the findings of the study to a greater context or target population. Is it possible in my research? Specifically, my ontological and epistemological beliefs do not support the notion of generalisability because every context is unique and changeable. Similarly, the notion of 'internal validity' embodies the concept of depiction of the truth from 'out there'. Ultimately, this concept serves the interests of a positivistic observational standpoint for perceiving the nature of reality.

Given the context of my research, I have attempted to resolve the triple crises - crisis of representation, legitimacy and praxis - in order to address the issue of rigour (Denzin, 1997). For me, the term representation entails the degree of portrayal of, and connections between, my personal experiences and ethnographic contexts. The notion of representation deals with the portrayal of my experiences of the contexts for resolving the tensions (cf. research problem) developed in constructing personal experiences (Spry, 2001). I have envisaged that the crisis of representation can be resolved by strengthening the pedagogical focus in writing as well as by portraying experiences via multiple forms of textuality. Showing my agreement with Denzin's (1997, pp. 25-26) quote by Joyce, "Writing is inscription, an evocative act of creation and representation", I hold the view that textuality is one of the evocative means of communicating personal experiences. In essence, I am using the following strategies for addressing the issue of representational crisis:

- **Multiple genres of textuality:** I am using multiple genres of writing to uncover the multilayered meaning of my experiences. Specifically, I have mentioned four genres of writing under the subsection of Multiple textuality and Bricolage of this paper.

- **Focusing on the purpose:** Representational crisis is also related to the degree of focus on the research objectives/questions (cf. tensions). The main purpose of my inquiry is to create pedagogical thoughtfulness among the readers (Nepali teachers and teacher educators) regarding the issues arising in the research questions.

- **Legitimating the research purpose:** The research is aimed at improving my practice. Therefore it is legitimate for my professional context. This issue can be resolved also by increasing the verisimilitude of my writing and creating egalitarian and dialogic relationship between the writer (cf. author) and the readers.

- **Transferability criteria:** I consider "thick description, provision of vicarious experience, metaphorical power and personal reconstructability" (Guba & Lincoln, 1989, p. 224) as the transferability criteria for the proposed inquiry.

Threats to transferability: Unlike the notion of generalisability, transferability deals with elements that are common to different contexts. Specifically, Guba and Lincoln (1989) elucidate that the researcher needs to provide extensive and thick description of the context, the time, the place and the culture. Nevertheless, the following may be the main
threats to the transferability of my research.

- **The phenomena:** I may consider phenomena that may not be appropriate to others. Specifically, this study depicts substantially my experience of events that occurred in my context.

- **Subjectivity:** I may overemphasise my subjectivity beyond the level of relative subjectivity. The effect of such subjectivity may result in minimal commonalities between my texts and the readers' context.

- **Incommensurability:** Lingual, cultural and educative incommensurability may impress some readers differently. Some educational events and contexts may be unique and incommensurable to other (non-Nepali) contexts.

In my research, the crises of legitimacy and praxis are also connected with the crisis of representation of my experiences. Taking an insight from Denzin's (1997) notion that the form of legitimacy is extremely political because the discursive system cannot be independent of power and ideology, I subscribe to the ideology of social justice and cultural reconstruction. Furthermore, the notion of verisimilitude and lifeliness is another criterion for resolving the crisis of legitimacy of my texts. Unlike the realist meaning of verisimilitude - "ability to reproduce and map the real" (Denzin, 1997 p. 10), I have embraced postmodern verisimilitude in order to construct my textual representations as if they resonate with the real. In my research, verisimilitude deals with such relation between the text and textuality that renders contextual meaning to the readers. In this connection, it is appropriate to cite John van Maanen (1988) as he infers:

> Meanings are not permanently embedded by an author in the text at the moment of creation. They are woven from the symbolic capacity of a piece of writing and the social context of its reception (p. 25).

Drawing my concepts from John van Maanen's notion of interlacing meanings in the context of the reader resolves the tension (to some extent) of the legitimacy of text and textuality. In essence, the resolution of the legitimacy crisis relies on the legitimacy of my research focus and the text.

Praxis is the nexus between the representation and legitimacy in this research. To some extent, praxis may deal with the notion of the theory-practice dualism and critical traditions (Quantz, 1992). Specifically, in my educative contexts, praxis means a series of thoughtful practice that becomes a matter of my continuous reflection. Furthermore, negotiating with the perspective of Foucault (cited in Quantz, 1992), I have constructed the meaning of praxis as: to act consciously in order to address the political nature of ownership of knowledge. Similarly, informed by van Manen's (1990) notion of pedagogical praxis as "thoughtful action: action full of thought and thought full of action" (p. 128), I often depict my texts as though practice always comes first and theory appears later-during the reflection. Furthermore, the model of action-reflection-practical knowledge (Clandinin & Connelly, 2000) helps me to construct my personal practical knowledge. Illuminated by these ideas, I have summarised the issues of praxis as follows.

- As the proposed research is based on my experience, I am the main participant of the research. Taking the notion of addressing the nature of knowledge claims, this has been performed through my research process (reflectivity - how am I representing experiences?) and product (reflectivity - what experiences am I reflecting?).

- In the present research, I purport to address the educative context by using my lived experiences. Therefore, pedagogical praxes are central to my research. The writing criteria (cf. rhetorical criteria), which I have proposed for my autoethnographic text, also resolve the issue of the crisis of praxes.

- Mainly, I have been reflecting upon my own actions (cf. action criteria) and others that have influenced my situatedness. Reflecting upon my situatedness and providing them with pedagogical flavours creates spaces for readers to reflect upon their own pedagogies. Furthermore, my texts can be the bases for readers to create vicarious experiences of being a teacher educator, student and teacher. By such experiences, they can reflect upon their own praxis.

**Endnotes**
1. A Nepali word, borrowed from Sanskrit language, signifies an act of creation.
3. Twenty one is called Ekkais (/ekka:Is/) in Nepali.
4. Bahun-Chettri/Chhetri-Bahun is generally named for the community of Aryan people.

References


Another version of this article is presented at http://pctaylor.com/publications/WAIER%202003/WAIER_paper.htm