Narrative, Knowing, and Emerging Methodologies in Environmental Education Research: Issues of Quality

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Abstract

Within the context of an educational research community that now seems prepared to take narrative forms of representing human experience seriously, this paper addresses issues of quality within such inquiries, as applied to research in environmental education. At issue here is not whether we shall have criteria but what might be the basis for criteria within a transformed social inquiry. Grounded in studies of teacher thinking and practice in Canadian elementary schools, the paper traces the debates about issues of quality in qualitative inquiry through the language of positivist, interpretivist, criticalist and postmodernist notions of representation and legitimation. Ultimately, narrative methodologies pull us away from foundational criteria toward more situated local community perspectives; conversations about moral, ethical, and critical consciousness and social critique that connect personal to social to environmental dimensions of discourse practices.

Résumé

Dans le contexte d'une communauté de recherche pédagogique qui semble maintenant prête à adopter des formes narratives pour représenter sérieusement l'expérience humaine, ce document aborde les enjeux de la qualité de semblables enquêtes applicables à la recherche en éducation environnementale. Il ne s'agit pas de savoir si nous aurons ou non des critères, mais plutôt de déterminer ce qui peut constituer le fondement des critères d'une enquête sociale transformée. Appuyé sur des études au sujet du raisonnement et de la pratique des enseignants dans les écoles élémentaires canadiennes, ce document retrace les débats sur les enjeux de la qualité des enquêtes qualitatives au moyen du langage de notions positivistes, interprétatives, critiques et postmodernes de la représentation et de la légitimation. En définitive, les méthodologies narratives nous éloignerons des critères généraux pour nous amener à des perspectives communautaires locales davantage situationnelles, ainsi qu'à des conversations sur la conscience morale, éthique et critique et sur la critique sociale qui relient les dimensions personnelles, sociales et environnementales des pratiques du discours.

> People outside natural history find it quaint that naturalists study chimpanzees, for example, case by case, constructing elaborate accounts of a single individual. It is far from quaint, (Steven Jay) Gould argues, because there is no essence of chimpness; there are, instead, infinite details and possibilities each of which expands our understanding, enriches our knowledge, and can be a means for supporting quality and accomplishment or insight for change and transformation. (Ayers, 1992, p. 157-158)

In their book, *Narrative in Teaching, Learning, and Research*, McEwan and Egan (1995) describe the "turn to narrative" within educational research as one of the most impressive shifts in the history of the field. This shift from an assumption that the teacher is simply an instrument in the production of school achievement to a view of the teacher as an intelligent agent in educating children represents a new research perspective of personal agency and empowerment (Carter & Doyle, 1996). Given the rapid emergence and growing pervasiveness of qualitative forms of inquiry that use narrative, it seems useful to consider the potential of its application to environmental education research, particularly in light of issues of quality that may arise. This paper focuses on methodological issues that characterize the qualitative research literature and whether normative criteria are likely to improve environmental education research. The paper draws on experiences of educational researchers who have used narrative methods in areas such as teacher thinking and practice in environmental education.

Narrative in Qualitative Research

The study of narrative is the study of the ways in which humans experience the world. It is as "old as the hills." As a mode of thinking and feeling, narrative uses storied knowing to attempt to give meaning to ways in which humans understand the world and communicate that understanding to others. As both a phenomenon (i.e., story) and a method (i.e., narrative inquiry) (see Connelly & Clandinin, 1990), researchers who use narrative understand it as a legitimate form of knowledge, an epistemological claim, which is fundamental to arguments about what counts as research (Elbaz, 1983). If you believe that narrative is a linguistic form uniquely suited for displaying human existence in situated action, then understanding people's stories is a legitimate research task (Polkinghorne, 1995). According to Bruner (1986, 1990), narrative inquiry can help us understand reasons for our actions which are motivated by beliefs, desires, theories, and values. Thus, narrative researchers describe lives using narratives or stories of various kinds and narrative-related methods such as case history, biography/autobiography, and life history which focus on an individual within a social context considered over time (see Goodson, 1994).

Interpretation is involved, of course, in providing convincing accounts of what a story means, or so that it makes sense not only to the teller but the listener, particularly if the story is told by a researcher/narrator other than the author. This interpretive turn becomes a sort of double hermeneutic where the inevitable critics of qualitative forms of inquiry begin asking questions about why this particular story is being told, why it was selected for retelling by the narrator, what are the motives, interests, and whose voice is silenced or privileged, as well as other questions that reflect on issues of representation and legitimation.

Answers to such questions are not always as definitive as positivist critics demand. Stories, for all that they require verisimilitude (Polkinghorne, 1988, 1989), cannot produce the Truth. Although narrative is one of the fundamental sense-making operations of the mind and perhaps the best window into how we think, and is foundational to learning (see Hardy, 1977; McEwan & Egan, 1995), its methods are always exploratory, conversational, tentative, and indeterminate—all these in the modernist age of science that devalues story and, in fact, values nonnarrative as a measure of sophistication in rationality.

The politics of representation and legitimation within qualitative forms of inquiry was brought into sharp relief in Rishma Dunlop's (2001) justification of the novel form of her doctoral thesis within the conservatism of a Canadian post-secondary institution. Dunlop's story of exploring the landscape of alternative forms of representation and the value of fictional narrative as a legitimate contribution to "knowledge" is reminiscent of my experiences with graduate students in representing autoethnography and other alternative forms of writing as legitimate forms of scholarship to the academy (see Eisner, 1997). The problem of the narrative project is that it runs the risk of becoming an arbitrary set of procedures motivated by political or economic criteria (Conle, 2000). While there is the need to ground our research work in experience, as researchers, we also need to demonstrate our awareness of the limitations of our qualitative methodologies, particularly because each genre or tradition has its own inherent weaknesses (see Hart, 2000).

In our own work within Canadian elementary schools we struggled to adapt our methods within an emerging and evolving research design (see Hart, 1996). Our focus on narrative inquiry as a way into teacher thinking about environment-related elementary school practice became even more complex when we realized that teacher actions were being driven by values as much as by subject matter knowledge. In the end, we reconceptualized our process of representation so that our interpretation of environmental education within Canadian elementary schools was expressed in teachers' voices as much as in our own. However, our understanding of the benefits of narrative was tempered by several limitations. For example, although narrative allowed us to delve beneath the outward show of human behaviour to explore thoughts, feelings, and intentions of teachers who appeared to us as agents active in constructing their own curriculum, it was quite easy to succumb to

the seductive power of myth and fiction which may have been distorted or concealed in the telling or the writing. Our participant teachers simply responded to our interview questions until we learned how to engage them (Sanger, 1996) in more authentic two-way conversations (Josselson, Lieblich, Sharabany, & Wiseman, 1997; Kvale, 1996; Rubin & Rubin, 1995).

Interviewing as a method (see Kvale, 1996), along with other methods such as participant observation and cooperative inquiry (Heron, 1996), has evolved in form and process in the past few years (Bryman & Burgess, 1994; Coffey & Atkinson, 1996; Cortazzi, 1993; ten Have, 1999; Wolcott, 1994). However, our own apprach to method evolved as much from our field experience as from our readings about method. We learned how to listen better. We learned to recognize stories for what they are—versions of reality that resonate with the community (or do not). In seeking to uncover and surface unconscious, incomplete, partially coherent, or implicit thoughts as narratives, we also learned how to help teachers do that for themselves, to accept critical appraisal, to rely on intersubjective and negotiated understandings that help us adhere to reasonable levels of trustworthiness. That is, we learned about methods and methodology recursively, on the ground, from those elements of our narrative-oriented fieldwork that helped us make sense of our own stories, our beliefs, and not only in terms of our own thinking but in terms of teachers' thinking about what was going on in those classrooms.

We also learned about the importance of context and of the cultural embeddedness of not only teachers' work but also our own. According to Bruner (1990) narrative sensibility involves knowing and recognizing our own stories within the myths, folklore, and histories of our culture. As frames for our identity, narrative inquiry entails finding a place within one's culture. The challenge is one of becoming conscious and critically reflective (about, for example, how environmental education fits or differs from other curriculum goals and pruposes). The challenge is to recognize the beguiling nature of narrative inquiry as a window into consciousness because it may merely be a mirror to our own. Narrative is as much a way of knowing ourselves as a way of organizing and communicating the experiences of others. In our environmental education inquiries we came to see value in some form of intersubjective debate as essential to communication of other people's narratives about who we are, what we believe and why we follow one course of inquiry rather than another. How else, say McEwan and Egan (1995), can we understand the complex mental life of a teacher outside the narrow instrumentalist conceptions of thought and action?

Finding our Way in Research Method

As I read graduate student theses or articles submitted to environmental education journals for publication, I am disappointed most often by the lack of

attention to grounding in methodology. Qualitative methods require as much attention to detail as quantitative inquiry, although the process is quite different. Unlike the rather uniform methodological assumptions of quantitative research, qualitative inquiry consists of several distinct traditions such as ethnography, phenomenology, narrative inquiry, participatory action research as well as critical, feminist, cultural, and postmodern perspectives (see, for example, Denzin & Lincoln, 1994, 2000; Lincoln & Guba, 2000). Each of these genres has its own paradigmatic tradition of scholarship which translates through its ontology and epistemology into methodological tendencies that, in turn, govern the choice and use of particular methods (see Schwandt, 2000; Vidich & Lyman, 2000).

It is the responsibility of the researcher to ground his or her methods in methodologies, each of which implicates a particular view of knowledge as well as of reality. While it is not necessary or even desirable to lock oneself into one narrow strand of methodology, it is necessary to demonstrate understanding of the methodological basis for each method. Some methods are more compatible within certain methodological frameworks. For example, conversation as method is most likely to result in stories as data (Florio-Ruane, 1991). This seems so obvious, but we do indeed need to "sweat the details" because the entire enterprise of qualitative inquiry is predicated on methodological critique and debate—on critical reflexivity and intersubjective scrutiny. Lotz-Sisitka (2001), for example, recounts the critical nature of her evolving qualitative inquiry processes: "I tell how my research design decisions were confronted and re-adjusted in processes of reflective engagement . . ." (p. 13).

The importance of methodological grounding is illustrated in Palmer's Emergent Environmentalism Project, particularly as it relates to adult autobiographical recall about certain "significant" life experiences. Certain personal life history experiences were reported to have been important in constructing a sense of ecologcial identity (Thomashow, 1995) or environmental ethics. Several researchers, working within their own countries, participated in providing autobiographical narratives which Palmer and Suggate (1996) coalesced into more general reports about the importance of significant life experiences in the emergence of "environmentalism" among environmental professionals. My involvement, working with Canadian participants, served as an introduction to the politics of personal knowledge (see Grumet, 1991) or the self narrative (see Witherell, 1991). As Carter and Doyle (1996) put it, one must learn how to ferret out how multiple interpretations of the meanings of social experience come to position one's identity as a teacher.

This line of research on significant life experiences was part of a larger set of ideas originating in the United States in the early 1970s (see Tanner, 1980 and spawning a series of reports from widely separated researchers over several years (see, for example, Chawla, 1998a, 1998b; Sward & Marcinkowski, 1997). However, it seemed that a resurgence in the mid-1990s spawned

several North American Association for Environmental Education conference seminars and workshops as well as publications such as a special issue of *Environmental Education Research*, *4*(4), 1998. This research focus on significant life experience generated enough interest to support a set of critical response papers which were also published in *Environmental Education Research*, *5*(2), 1999. Critiques came from a range of perspectives but each in its own way challenged either the methodology (as opposed to the method) or the epistemological or ontological stance implicit or explicit in the research. Whether we agree or not with any or all of these critiques, and *Environmental Education Research* editor William Scott invited wide participation in this discussion, the point is that writers in the various genres of qualitative research, in particular narrative inquiry, should be prepared to extend their discussions about methodology and its relationships beyond initial publication.

Critique is essential to progress in the qualitative inquiries of the social sciences. Thus, it is essential that researchers be precise about their methodological practices and that they know enough to anticipate or to marshal responses in order to advance the discourse, and hopefully the practice of that form of research. Deeper qualitative and narrative inquiries into personal thinking and reasons for practice may serve to problematize current thought, risking that "special resentment" that Rorty (1979) recognizes may occur when beliefs so central to our desires are challenged. This line of reasoning applies as much to research practice as it does to pedagogy. Thus, response to critique is essential. The response, however, is more plausible if the author is able to demonstrate thorough understanding of the methodological grounding, to communicate this understanding within the thesis or article, then extend that line of reasoning about method beyond the critique into a more thoughtful description or justification of process—a kind of self-critical anticipation of reaction followed by a thorough engagement in the inevitable methodological discussion that should follow.

Connelly and Clandinin (1990; Clandinin & Connelly, 1994, 1995, 2000) introduce many ideas within the genre of narrative inquiry that appear useful in promoting reflection and introspection. Part of the difficulty, they say, in writing narrative is in finding ways to express complexity as we understand it. Researchers restory events, select certain stories over others and do so with varying degrees of intent or ignorance of the process. They describe the dilemmas as partly a problem of multiple I's, in other words, how we can become plurivocal through as much disclosure as we can muster, recognizing whose voice is dominant and eliciting our own personal qualities such as a concern for ethical questions of trust and relationship. The risk, of course, is self-dillusion and falsehood, those dirty little lies or genuine failures of perception that illustrate the importance of the intersubjective quality of such inquiry as well as turning a sharp ear to our critics by responding to legitimate issues of narrative smoothing and narrative secrecy, absent presences, present absences, and blind spots by conscientiously discussing issues of selection,

silence, fictions, and other limitations of the indeterminate condition of qualitative inquiry and with some humility, please (Jickling, 1991).

Issues of Quality in Qualitative Research

Given the necessity for critique, it seems appropriate to focus on certain issues of quality that may be useful in qualitative forms of educational inquiry, based on our research experiences in studies of teacher thinking and children's ideas in environmental education. Although we have tended to rely on narrative inquiry because we believe that teachers want to hear teachers' stories rather than researchers' theories, we anticipate that more active approaches, interactive and participatory, are more likely to address political as well as intellectual growth and change. We have begun to explore this idea in a new research program focused on mentor-protégé relationships and our recent experiences and readings will inform this new process (see Hart, 2001).

Aware of the dangers of an over-reliance on narrative, we feel the need as researchers to engage in conversations about our conceptions of the way things are, our views of knowing and our beliefs, and about what forms of consciousness we think advance our understanding and our practice. It has been our experience that that which succeeds in deepening meaning, expanding awareness, enlarging understanding is in the end a community decision. So, conversations (e.g., conferences) and writing (e.g., publication) can be an active means of testing these ideas in the community, that is, if the climate exists that both supports the growth of ideas in a variety of ways and encourages critically reflective engagement about what we are doing and how we have chosen to represent our work. Given new arguments about alternative forms of writing (see, for example, Dunlop, 2001; Richardson, 2000), novel seems a more meaningful form of representation, in terms of practitioners' understanding, than descriptive narrative or other forms of representation.

Whatever the form, quality is paramount; so how do we judge quality? We need a process through which researchers are able to deepen their insight into their own research values as well as develop their capability to translate these values into research practice. This involves understanding the epistemological assumptions underpinning various notions of narrative inquiry. Can we accept forms of knowledge, for example, that come from an epistemology of practice in which knowing comes from within the action, itself, where knowing is practitioner-derived rather than expert-derived, and where growth and change come from problems of practice that cause those involved to actively reflect conflicts in values? In teachers' minds, professional knowledge is not a systematically organized body of theoretical knowledge, rather a shared body of inherited practical knowledge—a set of values, preferences and norms that make sense in practical situations.

To act is to theorize, says Pagano (1991). I cannot describe my day or a moment in my classroom without recourse to intentions or assumptions. We act in ways that reflect our beliefs about the way the world works. Teachers' theories are stories about the kind of world we want to live in and about what we need to do (with children) to make that world. If research can be viewed similarly, as a social practice, then quality cannot be improved other than by improving the researcher's capability to realize their own values through their research practice. Change in both cases comes from critically reflecting on practice in terms of the traditions of thought that shape those practices. In this way revision of knowledge and beliefs occurs interactively rather than by applying a universal tool kit of theoretical rules. My stories reveal my values and attitudes, my sense of my own cares and responsibilities, whether as teacher or as researcher. To know ourselves then becomes a teacher's or a researcher's primary obligation. Education is meant to change people, as is research; not through colonizing their consciousness but by bringing them to a place where they can go on to make up their own stories (Pagano, 1991).

Implied in telling a story (whether from life or the imagination) is that meaning is derived from our interpretation rather than from rules (of analysis). According to Polkinghorne (1988, 1989) and Bruner (1990) we interpret stories from their verisimilitude, their lifelikeness. Rorty's (1979) distinction between knowing truth versus endowing experience with meaning is important here because humans, he asserts, have the ability to see connections without being able to prove them. In other words, stories of human experience (i.e., intention and action) are written with a different interest than whether something is testably right. The narrative interest is in whether it is believable. Bruner's (1990) distinction between two fictions (i.e., two forms of illusion to reality) is useful in thinking about our goal in narrative or other interpretive forms of inquiry. Rather than seeking universal rules through context independence and objective verification, the purpose of most qualitative inquiry is to understand human events, within context, in such a way as to leave room for reflection (perhaps critical reflection) and intersubjective scrutiny. This leaves a place for multiple perspectives without succumbing to relativism. The pluralism implied, says Bruner (1987, 1990), about what is the right interpretation, is not settled by dogged insistence on certain absolute values rather by a willingness to negotiate differences in worldview (i.e., open-mindedness) without loss of commitment to one's own values (or, indeed, their negotiation). Thus, narrative can be viewed both as a mode of thought (a way of knowing) and an expression of worldview (i.e., ontology).

The rightness of interpretation, while dependent on perspective also reflects certain conventions of method (which vary across genres from ethnography to action research), of what counts as evidence, consistency, coherence. Not everything goes: there are inherent criteria, not technical criteria but ethical criteria, of rightness, ethics, moral values which should come through clearly in the research process as well as retrospectively

through conscious, critically reflective dialogue and debate. You cannot argue for a particular interpretation, according to Bruner, without taking a moral stance and a rhetorical posture (Bruner, 1990). Qualitative research entails a disposition to examine assumptions underlying research practice in terms of the extent to which the values ostensibly guiding researchers work are actually served by their practices (Grundy, 1989).

In our work with Canadian elementary teachers who engage their children in some form of environment-related school activity, the best we could do to understand their thinking was to find ways to enlist their help in interpreting their meanings. Making sense of teachers' and children's thinking about/for environment was challenging because of the sheer intellectual task of bringing tacit presuppositions and unreflective actions and interactions, those deep value positions (acquired early in life), to more conscious levels of reflection and discussion. On reflection, we believe that, as researchers, we focused on teachers' narrative constructions (i.e., fictions) because they constituted forms of explanation that make sense to their peers. These stories-in-action communicated teachers' thought-practices amidst the messiness of daily life. Their colleagues described them as plausible, credible, believable; they appeared to be authentic, we think, and trustworthy. But were they? How could we as researchers discuss or debate the warrant of these stories? We must begin by trying to articulate our own methodological reasoning, reflectively, just as we expect our teacher-participants to engage their thinking/practice. Even that is not enough; we need to listen to our critics.

Critique that takes reflection into the intersubjective needs a language that not only acknowledges the indeterminacy and openendedness of social phenomena but finds ways to deal with their associated problems. The debate within the literature of qualitative inquiry now questions whether we should be seeking criteria of adequacy for "good" explanation within acknowledged indeterminacy (see Denzin, 2000; Lincoln & Guba, 2000). While this debate is worth following, criteria of quality already exist within qualitative inquiry, although differences occur between genres such as ethnography or phenomenology, and participatory (action) forms of inquiry. Genres themselves are dynamic and evolving so that the criteria of adequacy for critical ethnography or various feminist or postmodern turns within ethnographic research may be different. The important point is that each of these research paradigms are becoming more self-reflective in character, more critical some might say. Multiple valid explanations of phenomena are recognized and expected as are different types of explanation, raising the possibility of alternative, perhaps competing claims (Bohman, 1991). But the question remains, how can we generate high quality, meaningful qualitative research without recourse to objectivist or essentialist standards? Several approaches are possible. In this paper a narrative interpretive framework serves as a focus, given the "requisite variety" within qualitative forms of inquiry (Hart, 2000).

Whether Criteria?

One approach to issues of quality is to engage in reconstruction of traditional objective criteria such as validity, generalizability and reliability, terms already retheorized within several interpretive paradigms (see Denzin & Lincoln, 1994, 2000). Guba uses the term paradigm or interpretive framework to describe a basic set of beliefs and principles that guide research methods, beliefs and feelings about the nature of reality (i.e., ontology), what counts as legitimate knowledge (i.e., epistemology) and how we should go about studying and collecting knowledge (i.e., methodology). According to Denzin and Lincoln (1994), each of these interpretive paradigms work against yet alongside positivist and postpositivist models. These models tend to work within a realist ontology and objectivist epistemology, hence quantitative, applied science methodologies (which may include rigorous defined qualitative methods), whereas each of the interpretive paradigms tend toward relativist ontologies (multiple constructed realities), interpretive epistemologies, and naturalistic methodologies (e.g., ethnography, phenomenology, narrative inquiry). Whether critical theorists, feminists, or a variety of poststructuralists would agree with their inclusion within this framework, there are definite paradigmatic differences among these genres of inquiry which have become more distinct and contentious in more recent iterations (see, for example, Kinchloe & McLaren, 2000; Lincoln & Guba, 2000; Schwandt, 2000).

According to Lincoln and Guba (2000), issues most often in contention among both established and emergent paradigms include claims about the nature of knowledge (i.e., epistemology) how knowledge is accumulated (i.e., methodology) and how quality is evaluated (i.e., quality criteria, values, ethics, hegemony). There is a need to extend this analysis. However, at present, findings are typically presented in terms of criteria such as credibility, transferability, dependability, and confirmability, although feminist, critical, poststructural, and cultural studies paradigms add criteria relating to race, gender, and class, or more broadly, oppression, injustice, and marginalization. To follow the discussions and debates through the research literature is complex and beyond the scope or intent of this paper. However, researchers in education (and environmental education) should be aware of the kinds of criticism that their work may generate from the perspective of these criteira and their association with validity, reliability, and generalizability in the minds of some critics. In fact, several perspectives on the issue of quality should be considered.

New Criteria for New Perspectives on Research

Foundationalist-oriented researchers argue that to assure confidence in the findings of qualitative research, standards, originally parallel to those of traditional research (see Lincoln & Guba, 1985, 2000) are emerging, amidst

debates about appropriate warrants of quality (see Guba, 1990; Phillips, 1987; Smith, 1984). At least within interpretive (including narrative) inquiry, methodological rigor seems to be established in two ways, trustworthiness and authenticity. Although it is recognized that interpretive forms of inquiry are based on axioms markedly different from traditional research, trustworthiness is defined in terms of elements that correspond, albeit roughly, to internal and external validity, reliability, and objectivity. These elements—credibility, transferability, dependability, and confirmability, have been used to assess the quality of the findings of qualitative inquiries, in terms of their truth value, applicability, consistency, and neutrality (Lincoln & Guba, 1985). Each of these criteria, familiar to most qualitative researchers, have been applied to justify narrative inquiry, although some evolution from ideas such as triangulation (Denzin, 1978) to more complex renderings such as crystallization (Richardson, 1994) has occurred.

Whereas trustworthiness criteria are applied to assess the quality of the results, authenticity criteria such as fairness, and ontological educative, catalytic, and tactical authenticity focus on the nature and quality of the research process. Less familiar perhaps than the elements of trustworthiness, these criteria address some of the limits of trustworthiness, that is, when it is considered in parallel to traditional aspects of rigor (Rodwell & Byers, 1997). They also address issues of representation such as inquirer bias, multivocal balance, respect, complexity, and potential for change and empowerment that have been applied as social scientists have expanded what counts as social/educational data (Lincoln & Guba, 2000).

Several new genres of qualitative research such as cultural studies, life history, and postmodern forms have engaged the foundational controversy in quite different ways. These "new paradigm" inquirers rely increasingly on the experiential, the embodied, and the emotive qualities of human experience that contribute to the narrative quality of life (see Ellis & Bochner, 2000; Fine, Weis, Weseen, & Wong, 2000; Richardson, 2000). More transgressive forms of validity criteria such as Lather's (1993) notions of simulacra/ironic, rhizomatic, and situated validity foster thinking about ideas of heterogeneity, multiple path opening, and tentativeness in ways that bring ethical and epistemological criteria together via practices of engagement and self-reflexivity. Taken together, according to Lincoln and Guba (2000), these criteria can act as ways of interrupting, disrupting, and transforming "pure" truth into a disturbing, fluid, partial, and problematic truth—a poststructural and decidedly postmodern form of discourse theory (p. 182).

These qualitative extensions of ideas about validity are linked to issues of voice, reflexivity, and postmodern textual representation (Lincoln & Guba, 2000). The *way* in which we know, they say, is most assuredly tied up with both *what* we know as well as in our relationships with our research participants. In our narrative work with teachers and students in environmental education we encountered these issues of validity as an interaction of knowledge

(i.e., understandings) with moral values (i.e., beliefs; Hart, 1996). We had a view toward extending criterial standards toward the postmodern as Lather (1993) and others seem inclined to do. But we tended toward Lincoln's (1995) seven "new standards" proffered as progressive criteria. These "new" emerging criteria, which begin to address the epistemology/ethics nexus, direct qualitative researchers toward awareness of the positionality of standpoint judgments, specific discourse communities (e.g., narrative inquiry within environmental education) as arbiters of quality; voice, or the extent to which a text has the quality of polyvocality; critical subjectivity (or intense self-reflexivity); reciprocity (vs. hierarchy); sacredness; and privilege (Lincoln, 1995). That these criteria, and issues surrounding them, deserve more debate is obvious as we enter an age where we will see greater emphasis on inquiry that respects ecological values, community values, reflexivity shaped by personal histories, and gender locations, and democratic values (Lincoln & Guba, 2000).

Criteria without the Labels: The Quasifoundationalists

A second approach to quality issues in interpretive forms of qualitative inquiry seems to be to acknowledge the need for methodological scrutiny but without prescription of specific criteria. Admittedly a blurry area, occupying ground between foundationalist criteria and antifoundationalist eschewing of criteria, Lincoln and Guba (2000) couch the arguments in terms of the various debates about validity as well as postmodern arguments about interpretation/representation. On the one hand Schwandt (1996), Scheurich (1997), Smith (1993), and Smith and Deemer (2000) suggest that if validity is to survive it must be radically reformulated. At issue is not so much "whether criteria" but what the nature of social inquiry ought to be, whether it ought to undergo a transformation, and what might be the basis for criteria within a projected transformation. We suggest from our field experience that elements of critical, participatory, and postmodern perspectives on interpretivism, that introduce dimensions of thinking from dialogic, practical, and moral discourses as well as notions of critical reflexivity, are worth pursuing.

These connections, it seems to me, are particularly important for environmental education, because the epistemological and ontological underpinnings of certain genres of qualitative inquiry seem consistent with environmental education's socially critical and action competence aspirations. Transformative methodological goals of inquiry, such as participation, appear to be implicit in dimensions of a new ecophilosophical worldview (e.g., holism) underpinning much of environmental education. Participation, says Reason (1988) is an implicit aspect of wholeness. Personal growth may be fostered through social critique (see Fien, 1993; Robottom & Hart, 1993). "My personal belief is that our basic philosophical stance for a new approach to

human inquiry . . . (is) part of a new worldview that is emerging through systems thinking, ecologcial concerns, awareness, feminism (and) education" (Reason, 1988, p. 3). Great potential derives, say Day, Calderhead and Denicolo (1993), when research paradigm is complementary to the view of education, when methodology and worldview align. It would seem contradictory in a field such as environmental education, which encourages the nurturing of problem-solving, social activism and participation in social/environment problems, if researchers in this area did not nurture both human consciousness and socio-political action in respect of educational research.

Issues of discourse-practices[1] in methodology parallel and merge with issues of discourse-practice in new paradigm philosophy. Schwandt (1996, 2000), for example, proposes a practical philosophical framework that can act to transform social inquiry just as aesthetic, prudential, and moral reflexivity can act to transform society. Deep questioning (i.e., social critique) about how we shall get on in the world leads, in this quasifoundationalist argument, to criteria that guide social inquiry in seeking knowledge that compliments and supplements rather than displacing lay probing of social problems. Social inquiry as critique itself parallels social critique as a more practical philosophical endeavor grounded in a moral base of practical wisdom.

Arguing that absolutist criteria will never exist for qualitative forms of human inquiry, Manning (1997) argues that interpretive inquiry is well served with "a range of questions and considerations from which the researcher can establish purposeful, contextual and plausible studies (Kvale, 1995; Lather, 1993, 1995; Lincoln, 1995). However, she says, following Reason (1996), these considerations must start from questions of experience, need, and practice as defined by the people with and for whom we are working. This idea is congruent with Schwandt's (1996) idea of "guiding ideals" or "enabling conditions" to be applied contextually rather than as objective criteria. The problem with this notion is that it ignores the fact that the methods, as well as criteria for judging them, emanate from the assumptions of the emergent paradigm. Criteria can operate within the context of a variety of methodological assumptions and in turn within epistemological and ontological perspectives. Thus, just as we have conflicting perspectives in areas such as environmental education, we have requisite variety in methodological perspectives among advocates of similar research paradigms (e.g., ethnography, critical ethnography, autoethnography, and so on . . .; Hart, 2000).

Questions about qualitative research which appear on the surface to be methodological are often grounded in deeper differences in the valuing of certain forms of knowledge or views of reality. This leads us to question what constitutes the necessary conditions for adequate explanation within each research paradigm. Patterns of explanation have evolved from those cases that exhibit features of explanation of that type (e.g., narrative inquiry). This distillation of cases (e.g., significant life experience work within environmental education research) may begin to form a methodological core that is then

open to debate even as these methodologies evolve and mature. Whether we accept the conventions of these genres of inquiry, depends on our perspectives on the research project. We can't overcome the indeterminacy of human intentions and beliefs through recourse to causality, says Bohman (1991), so we turn to forms of explanation which take the indeterminacy of social action (or educational practice) as our starting point. Our actions are open to multiple interpretations, and contextual variations, so each research program tries to build interpretive and contextual components into a theoretical framework that makes sense and can be defended within the context of that research paradigm.

It seems useful here to distinguish between arguments about quality in the application of method (within the methodological framework of a participatory qualitative research paradigm) and in ascribing salience to one interpretation over another. Criteria have evolved in relation to methods, whereas newer critiques question whether the act of interpretation itself can be trusted. In our study of elementary teachers' rationale for environmental education, for example, how successful were we in interpreting our thick descriptions of environment-related activity in terms of teachers' tacit moral values and explicit curriculum goals? Were teachers consciously or unconsciously extending their personal and social values to include environmental values?

Although our apparent understandings were grounded within so called thick description and rich text derived from the existing frame of narrative inquiry (see Hart, 1996), we are cautious about our interpretations. We use methods which we think can help us to specify, for example, how personal life history or significant life experiences, within cultural boundaries, may have influenced belief formation. We present findings which appear to point as much to aesthetic as cognitive reasons/intentions for environmental education in Canadian schools in the absence of a specific curriculum mandate. We try, reflexively, to recognize limits to our interpretation within our own personal biases and context but recognize that such interpretations can only be evaluated intersubjectively—in light of other interpretations (whether by participants or critics). As researchers, we must acknowledge the possibility of other (multiple) interpretations, based on other (cultural, paradigmatic) realities.

To question whether we can recognize better interpretations from worse interpretations seems the responsible course. Given the assumptions of responsible methodological and ethical applications and acknowledging our understanding (or lack thereof) of the social theories that we think have informed our interpretation within these larger contexts of evidence and responsibility, we proceed in the best ways we know. Instead of a nihilist postmodern avoidance of interpretive indeterminacy we attempt to extend and integrate our macro and micro levels of explanation—not only introspectively but by encouraging social critique around our explicit (to the best of our knowledge) practical criteria (rather than technical, objective criteria). And then we wait, hoping that our work at least warrants commentary.

Criticism may follow and, if not centered on adherence issues relating to criteria, may take the form of reasoned questioning. The best criticisms, according to Bohman, (1991), are the most complete, being well framed in terms of ontology (e.g., relativism vs. realism); epistemology (e.g., subjectivism vs. objectivism); methodology (e.g., positivism-interpretivism-critical-post-modernism). They should be generative, pointing towards emancipatory directions by providing insights into coercion, power relations, and control. They should suggest practical alternatives for personal growth and social change, perhaps transforming existing thought and practice. They should respect the role of agents in altering their own circumstances and conditions of social life. Just because social agency evades all attempts to discover determinate laws or theories doesn't preclude the possibility of constructing adequate and fruitful explanations that can fulfill a variety of purposes (Bohman, 1991).

What Would We Do Without Criteria?

> Methodology is too important to be left to methodologists. (Becker in Adelman, 1989, p. 173)

Within a broad framework of interactive critique, Bochner's (2001) response to critics of personal narrative illustrate how research may be defended without direct recourse to criteria. He contends that conflicts over criteria usually boil down to differences in values that are contingent on human choices. Conversations focusing on criteria, says Bochner (2000), have as their subtext a tacit desire to authorize or legislate a pre-existing or static set of standards that will thwart subjectivity and ensure rationality. Such criteria, he says, distract us from figuring out how to keep the conversation going (with teachers) without invalidating the important differences that separate us, so that we can imagine and create better ways of teaching (about/for/through environmental education) and of living in this world. The word criteria itself separates foundationalists from anti-foundationalists (and modernists from postmodernists) in terms of how we make choices about quality, that is through objective methods or more subjectively through our values. Until we recognize these differences as a reflection of incommensurable ways of seeing, says Bochner (2000), we cannot begin to engage in meaningful conversation.

For anti- or non-foundationalists, validity depends on beliefs and values. Bochner (2001) argues that, in the face of plurality of the research field and the messiness and complexity of human thought and social interactions, we should not be surprised at the impossibility of a single standard set of criteria. It is more productive to approach quality issues in research, from the perspective that a multiplicity of goals imply multiple ways of assessing quality. There is no one right way to do research. There is no one right way to assess it. You cannot employ traditional empiricist standards to point out the

failures of interpretive, critical, or postmodern approaches. Questions about hypotheses, random samples, data analyses, and conclusions are inappropriate, naive, and perhaps even ignorant (see also, Hart, 2000).

From our own research perspective within environmental education, our understanding teacher thinking could not be depicted within a language of objectivity because it existed as a moral discourse of community. Narrative inquiry, that is, the storied nature of such inquiry, has a practical, ethical focus on moral responsibility. This places narrative in the service of a purpose that is different from the analysis of social facts. Polkinghorne (1995) makes a similar distinction between narrative analysis and analysis of narrative. Our interest was not in turning stories of teacher discourses-practices into concepts, or theories, or the grounds for explicating forms of social action. Rather, we regarded teacher thinking as a means of dialogue for the benefit of educators, and in exploring the possibilities of theorizing with stories instead of about them.

Similarly, in my autobiographical work with environmental professionals that led to ideas about the importance of early life experiences, (e.g., Palmer, Suggate, Robottom, & Hart, 1999) my interest was in the constructed, evolving, contested nature of personal narratives. This type of life history research should not be construed as an attempt at uniformity about how we come to be environmentally sensitive or ecologically conscious. If there is no agreement on goals, that is whether to treat story as evidence or as a means of being with others (what Jackson [1995] calls an understanding) it makes no sense to argue over who is right or what is the best method. We are not scientists seeking laws that govern our behaviour, says Bochner (2001); we are storytellers seeking meanings that may help us to cope with our circumstances.

Developing new images of validity may simply perpetuate an inappropriate quest for quality. Should we rather focus on ethical/moral concerns such as dialogue between researcher and participants (about, for example, whether the inquiry process and/or the findings were respectful and appreciative of teachers). Ellsworth (1989) argues for local knowing, local validity, and local choices. It is in the peculiarities (the differences) of the local moment where important choices are made (see Scheurich, 1997). Others (Noddings, 1992; White, 1991) argue for an attitude of attentive care, a willingness to hold open an intersubjective space to allow for difference. And a third alternative, introduces a critical, postmodernist, and ethical political focus in order to foster difference over stability, yet create a space for transformative possibility. Scheurich (1997) in assessing each of these approaches would be more comfortable if many kinds of voices could appear in the findings. What is called for, he says, is a Bakhtinian dialogic carnival, an open, polyphonic, subversive conversation on validity "as the wild uncontrollable play of difference" (p. 90).

Antifoundationalist approaches to issues of quality in qualitative research are intended to raise questions about the beliefs and values of the inquirer.

For example, questions about narrative ways of knowing (as an epistemological position) may interrogate the thoughtfulness in the application of the assumptions of narrative inquiry to the particular research project in context —as it was conceived, and adjusted on the ground. Confidence is derived if, for example, the researchers have considered, explicitly, why they have decided to live with an emergent (vs. preordinate) design, why they believe in co-constructed interpretation or research-as-instrument. These methodological choices are not presented as descriptive hollow slogans but as substantial decision points taken for good reason. For example, how do researchers address issues of representation, presentation of findings, or their writing style in terms of their commitment to, for example, notions of multiple realities (i.e., relativist ontology) as socially constructed, uncertain, and tentative? How do they discuss their rationale for establishing a respectful, interactive researcher-participant relationships (i.e., their subjectivist epistemology) based on notions of trust, collaboration, respect, and mutuality of purpose)? How do they describe their negotiation of mutually constructed findings, as expressed in narrative form (i.e., hermeneutic methodology)?

Choosing among the possibilities, even within narrative methodology, seems endless—why prolonged engagement, why persistent observation, why reflexive engagement, without a clear picture of the goals. Within narrative inquiry, for example, methods are justified by a depiction that interprets how individuals make sense of their practices within a particular context. In our own work in teacher thinking in environmental education, the choice of methods was intended to lead toward developing meaning which was grasped not by simply explaining behaviour observed but by searching for understanding through a recursive process of uncovering (for researchers *and* participants) underlying values, beliefs, and assumptions. These methods evolved during the early stages of the process as participants themselves showed us how to correct our naiveté in interviewing and participant observation. Textbook theory only goes so far without common sense and savvy that allow inquirers to adapt their methods to the personalities in context.

Critics of narrative (see, for example, Atkinson, 1997; Silverman, 1997) seem to ignore the fact that stories, particularly those from personal narratives, can give a measure of coherence and continuity to experience not available in its original moment. Charges of distortion, says Freeman (1998), are not only parasitic on empiricist accounts of reality, they forget the possibility of undistortion. What if we, as teams of researchers and participants, could co-construct accounts that could actually get to the bottom of things and serve to improve our discourses-practices? What if the research is viewed by participants as empowering, as opportunity for deep engagement in critically reflective tasks which values experiential knowledge as a touchstoned method? What if participants actually thanked researchers for the opportunity to talk and to write about the meaning of their lives in their reasons for teaching?

The idea of new paradigm inquiry, says Reason (1988), is to consider kinds of inquiry based on self-knowing, self-reflection, and self-critique. The purpose of personal or autobiographical narrative is to extract meaning from experience rather than to depict experience exactly as lived. This requires a transition in thinking about what counts as knowledge—from objective consciousness to critical subjectivity. This kind of knowing, while prone to distortion, false consciousness and so forth, also has many good qualities. "We do not try to suppress our primary subjective experience but nor do we allow ourselves to be overwhelmed and swept away by it; rather we raise it to consciousness and use it as part of the inquiry process" (p. 12).

The problem is how to engage the reader, to write persuasively, credibly, provocatively so that we are drawn to the stories, transfixed by the ideas and caught in our own thoughts to question both what we are reading and thinking. Surely, says Clough (2000), experimental ethnographic writing has meant to allow for a rigorous self-consciousness about the situatedness of a subject in her observation . . . Surely, the story makes us think of our own experience, our memories or feelings. . . Surely it allows us to experience vicariously relationships, thoughts, acts, about personality and culture. In evaluating a narrative-type manuscript for publication, Ellis (2000) questions the story line itself (about balance, flow, coherence, clarity), the writing (literacy, elegance, vividness, complexity, evocation), the goals (worthwhileness, legitimacy, worldviews, potential to stimulate persona/social activity), about ethics and so forth. The point is that just as we try to judge people in context so we should do no less for stories, honestly and fairly to the best of our ability. It is, after all, a subjective, unsystematic, and continually interrupted process.

Good narratives, according to Bochner (2000), help the reader or listener to understand and feel the experiences within rich descriptions of the complexity of personality, context, and time. Rather than invoking fixed criteria when asked to make a judgment, Bochner looks for abundant, concrete detail; structural complexity; a temporal framework that reflects the curvilinear process of memory work; the author's emotional stability, vulnerability, ethical self-consciousness, honesty, and reflexivity; persistence in digging beneath research decisions and actions, laying oneself out on the page; acknowledging limitations, contradictions, feelings, and layers of subjectivity. He wants to see the process of the researcher's and participant's journey, a "tale of two selves," a life course reimagined or transformed and, finally, a story that moves the reader/listener in heart and mind, an existential struggle for honesty and expression in an uncertain world (see also Lopate, 1994). How do we encompass in our minds the complexities of some lived moments of life? Not, says Coles (1989), with theories or systems—you do it with stories.

So What?

Current discourses of qualitative research reflect several positions on the issues of evaluative criteria. The controversies surrounding these positions are not likely to be resolved. As researchers we are obliged to find a place that makes sense. In our work within environmental education, for example, Rorty's (1979) idea of a communicative and pragmatic validity created by means of a community narrative, and bounded by moral considerations, made sense to us because we had an eye to the emancipatory narratives of the critical theorists and the goal of a more participatory and cooperative form of inquiry.

As Smith and Deemer (2000) observe, no method is a neutral tool of inquiry—each is methodologically, hence epistemologically and ontologically, grounded. Without the security of procedural objectivity, the question of quality becomes one of the kinds of justification that we feel we need within our research communities. For nonfoundationalist (or antifoundationalists), the issue of criteria for judging inquiry is a political, practical, and moral affair requiring active discussion and debate around actual cases.

In postmodern times we learn to live with uncertainty. Contingency, dialogue, fallibilism, and deliberation mark our way of being in the world (Schwandt, 1996). These ontological considerations are not equivalent to eternal ambiguity, lack of commitment, or an inability to act in the face of our uncertainty, says Schwandt (1996). The problem of how to make judgments without being able to appeal to foundations or to something outside the social processes of knowledge construction does not deter researchers such as Bochner (2000), Ellis (2000), Denzin (2000), Smith and Deemer (2000), or Lincoln and Guba (2000) from generating questions that fit with the pragmatic, ethical, and political contingencies of concrete situations.

Criteria, or sets of questions, continue to flow from feminist, communtarian, moral and ethical debate, rooted as they may be in concepts such as caring, sharing, neighbourliness, love, and kindness that provide the substance for social criticism as well as social action (Angrosino & Pérez, 2000; Christians, 2000; Fine, Weis, Weseem, & Wong, 2000; Greenwood & Levin, 2000; Kemmis & McTaggart, 2000; Lincoln & Guba, 2000; Madriz, 2000; Schwandt, 2000). The essential problem, say Smith and Deemer (2000) is to honour the need for, and the value of, plurality, multiplicity, difference, and so on, without giving over to excesses, for example, to inquiry so fragmented that lines of connection have been lost and with them the possibilities of personal, social, and environmental improvement.

Problems of representation and legitimation in narrative (and qualitative inquiry) take us beyond issues of criteria. If we continue to move away from foundational and quasifoundational approaches and toward more situated, local perspectives; if we continue the turn to performance texts that ask audiences to take a stand (perhaps moral) on the meaning of experience;

then, issues of quality within the diverse genres of qualitative research will rest on critical discourses and critical conversations about, for example, issues of text and voice, the existential, narrative as political text, reflexivity, and vulnerability in text. The value of inquiry is found in its potential for moral, ethical, and critical consciousness. These discussions about the potential of qualitative inquiry being assessed in terms of its ability to stimulate social critique are reminiscent of our own debates about this issue within environmental education (see Oulton & Scott, 2000).

As Lincoln and Denzin (2000) argue, it is time to get on with the research project: too much critique can stifle our work. Endless self-referential criticisms of postmodernists can produce mountains of text with few referents to concrete human experience. They operate in the abstract with opposing sides often preaching to the converted. Granted, we need critical dialogue but we also need dialogue with those who we seek to work with to change the world, those who are willing to get into the field rather than those who remain confined to armchairs and other points of strategic vantage.

Those who do qualitative research to avoid statistics may need to think again. Qualitative research is fraught with difficulties, which seem to be compounding as researchers struggle to find their way within new territory. The domain is complex, multiparadigmatic, and demands high quality thinking and writing that far and away exceeds the demands of the quantitative reporting of analysis of data. For those willing to do the reading and engage the field, and the critical discourse that will follow, there is reason for optimism. Whether the academics credit or discredit our attempts at narrative inquiry within environmental education, our response from practitioners is gratifying in the sense that they find support for their sometimes lonely struggle to engage in environmental education in the shared stories of their colleagues.

Difficulties involved in representing others turn on the amount of personal, subjective, poetic self that is openly given in the text (Lincoln & Denzin, 2000). Richardson (2000) and Ellis and Bochner (2000) are among those who discuss ways of returning the author to the text (e.g., through fictional narratives, drama, poetic text and stories). Rishma Dunlop's (2001) novel as dissertation, a struggle within the existing academy, may signal changes toward texts which, Lincoln and Denzin (2000) suggest, are simultaneously minimal, existential, autoethnographic, vulnerable, performative, and critical; acknowledging the value-laden nature of inquiry.

In many ways, the philosophy underlying environmental education anticipates the research that Lincoln and Denzin (2000) envision as an extension of current trends in qualitative inquiry, a type of scholarship and participatory research that shows us how to act morally with passion, respect and responsibility, to engage the future in complementary, rather than competitive, destructive ways. This kind of inquiry represents a call to action and morally informed social criticism, they say, that connects personal to historical and social (and we would add environmental) dimensions of discourse-practice.

> Only through meaningful work reflexively reconstituted can we invent ourselves in stories powered with an intellectual and moral passion strong enough to empower us to appropriate our own lives and to authorize our entry into those of others . . . These are moral fictions . . . where we encounter the otherness of our students in order that they may appropriate their own stories . . . In moral fictions we never come to the end of questions, the lives are uncompleted . . . moral fictions teach us our own ignorance and help our students to come to theirs. (Pagano, 1991, p. 205)

Notes

[1] Cherryholmes (1988, p. 9) uses discourses-practices to indicate and emphasize the relationship (dialectic) between discourse/thought (as it is stated orally or as written) and practice (what is done, or sometimes, what is done with what is said). The idea being that meanings flow back and forth from theory to practice.

Notes on Contributor

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